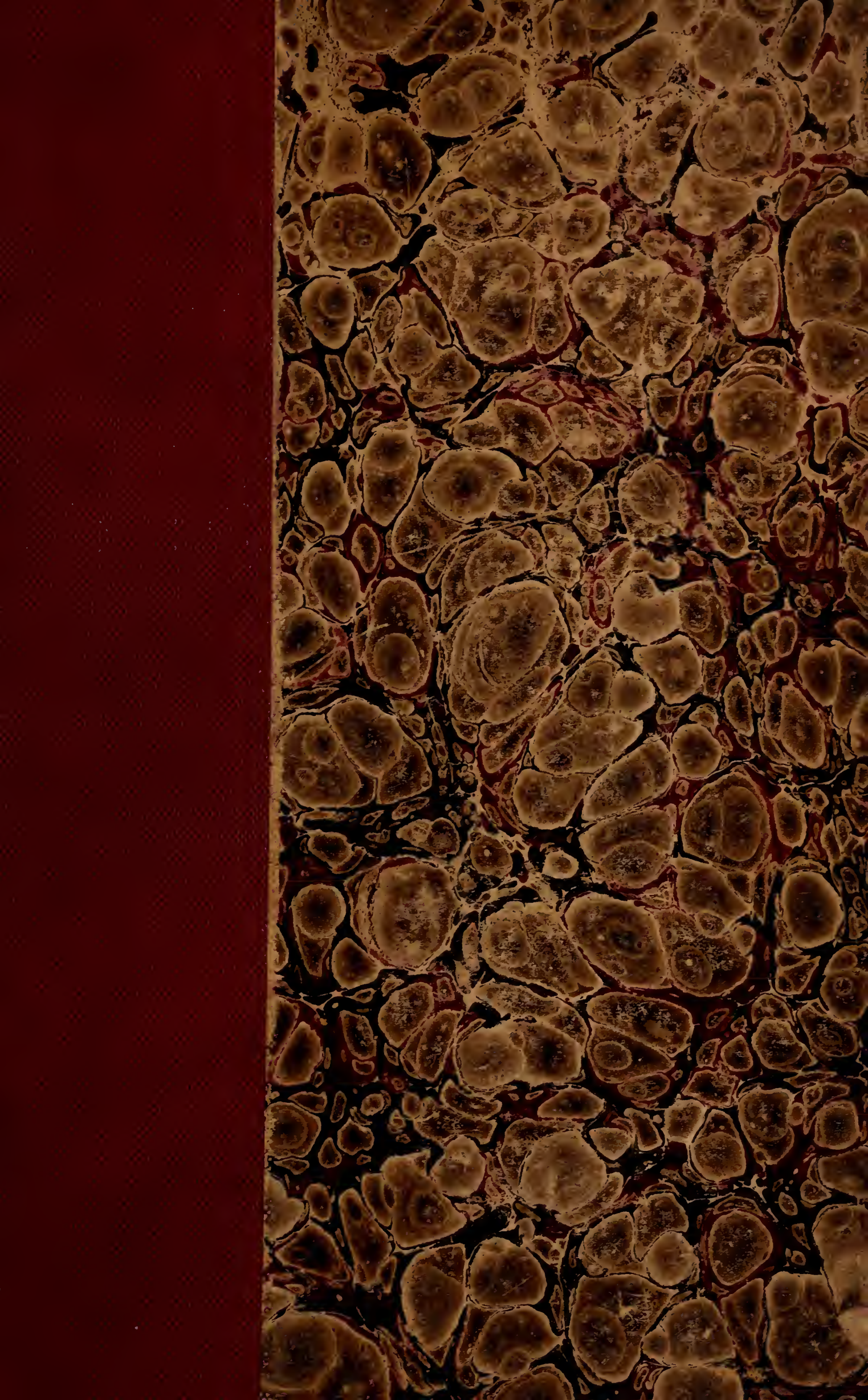


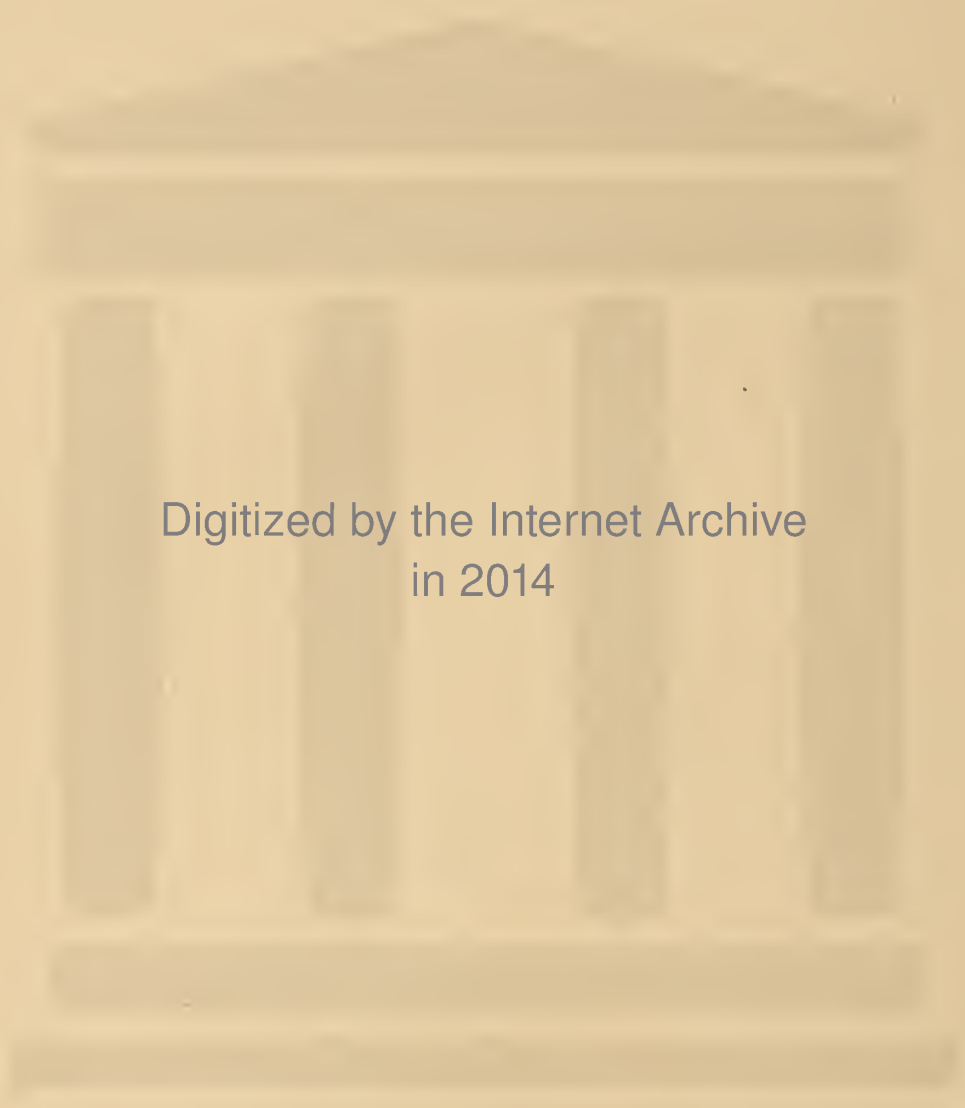


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ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the
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VOLUME XX

Ἀσφαλὲς καὶ ἔμπεδον ἔστω τὸ σὸν ἔδος. Ἐκ σκότου μὲν ἔξαγε
φάος, ἐκ δὲ πάθους ἀναψυχὴν



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ALBANY MEDICAL ANNALS

Original Communications

For the ANNALS.

INSANITY AND SURGICAL OPERATIONS.

By C. K. CLARKE, M.D.,

Medical Superintendent, Hospital for the Insane, Rockwood, Kingston, Ontario.

In the Province of Ontario there has, for some time past, waged an active war on the subject of gynecological operations as a cure for insanity, the enthusiasts on the one side claiming that practically all insane women have pelvic disease; the opponents of this theory insisting that pelvic disease is an unimportant factor in the development of insanity. In the heat of debate the fact that surgical operations may be a cause of insanity seems to have been lost sight of, and that surgical operations upon the generative tract are more likely to produce insanity than operations on other parts of the body. As far as pelvic disease is concerned, my experience has been that it exists in a small proportion of our patients, and of those in whom it does not exist a majority do not require surgical aid. In those upon whom we have operated the surgical results have been excellent, the effect on the mental condition generally disappointing and in some instances harmful. Pelvic disease no doubt accounts for a small proportion of cases of insanity, and when it exists should receive appropriate treatment. Possibly the general conclusions arrived at by the editors of the *Journal of Mental Science*, who, in the July number, 1897, wrote as follows in regard to this vexed question, are very near the mark: "We have nothing to say against operations of any kind being performed on the insane, for just the same reasons that make operations on the sane justifiable

or necessary, but we protest against removal of uterine appendages for any other reason. The day for indirect treatment of mental and moral deficiencies by heroic operations has gone by. Attempts in this direction have been made from time to time, but comprehensive psychology and good sense have hitherto triumphed and will continue to do so. The cortex, which, as Clouston says, must always be reckoned with, will prove to be the best protection of the reproductive organs against the over-sanguine gynæco-psychologist."

That surgical interference is not always happy in its results, the following history will prove:

M. J. R., æt 31. Single. Dressmaker. Habit of life, sedentary. Said to have had many attacks of insanity, of short duration. Marked neurotic history. A sister was for a time an inmate of a hospital for the insane and suffered from melancholia. The exciting cause of the patient's mental trouble is thus stated by her family physician: "Has had periodical attacks of melancholia since oophorectomy about nine years ago; has since brooded over and speculated about the results of the operation."

When admitted she had well marked symptoms of hypochondriacal melancholia, complaining that her blood did not circulate. She had the expressionless face so frequently seen after ovariectomy. In conversation with her the following history of her case was elicited: For years she suffered from dysmenorrhœa, and during her menstrual periods had more or less mental depression. For the relief of these symptoms ovariectomy was performed in 1888. After the operation she was very despondent, and since that time has had periodical attacks of melancholia. She states that at these times she feels as if she were in eternal punishment and would commit suicide if not under protection. Ovarian tissue treatment was tried for months with good results, but it is difficult to decide whether the improvement was not owing, to a large extent, to the careful nursing and moral measures adopted.

A marked increase in the weight of the patient took place. Of late relapses, even under ovarian tissue treatment, have been frequent, and the alternations between comparative sanity and deep melancholia are less marked. The pendulum will come to rest at the dementia mark in due course.

Insanity occasionally follows surgical operations, and it is a

matter of importance that the reason why should, if possible, be made clear in each case. At present there is no settled opinion in regard to the most common cause of such insanity, and the general heading "shock" has been called on to do duty, when better scientific explanation could not be given. As has been pointed out by various authors, in each case we must reckon with the patient's physical condition, constitution and heredity; must determine whether kidney trouble exists, and must also consider the effect of the anæsthetic used. The possibility of septic infection or toxic trouble from the local application of drugs must not be forgotten. As Dewey has suggested, it would be well if surgeons would keep accurate data regarding the mental effects caused by operations.

The proportion of cases of insanity following operations is difficult to get at, owing to the fact that no regular system of classification has been adopted. In my own experience cases of insanity following surgical operations have been of peculiar nature, and in the majority of instances of decidedly toxic type — that is, the maniacal condition was more suggestive of the delirium of a toxæmia than anything else, just as the delirium of chronic alcoholism differs from that of acute mania. The data in existence are so meagre that we have no means of determining the post surgical type of insanity, and it will be some time before this can be done. We are able, though, to feel satisfied that the toxic origin of such cases is more than probable. To illustrate this I will detail two cases coming under observation recently:

J. S. Age, 75. Of good heredity and naturally robust. In the autumn of '96 I saw her in her own home; she was then in feeble health and suffering from pronounced ovarian trouble, presumably cystic. There was nothing to lead one to suspect mental alienation, and the patient talked brightly about her condition and the operation which was inevitable. The operation was decided on after a good deal of deliberation, as the great age of the patient and her feeble condition rendered the outlook uncertain. Ovariectomy was successfully performed, but the patient became maniacal at once, and after a time her condition varied between melancholia and mania until the date of her admission. I had not seen her after the operation until she was received as a patient at Rockwood. She did not recognize any of her old friends; her facial expression was dull and heavy, and

her conversation wandering and incoherent; in fact, was more like the muttering of delirium than the conversation of one suffering from mania. She had hallucinations of sight and hearing. The day after admission her pulse was rapid (120), temperature slightly elevated, appetite greater than normal. Like many patients who are bordering on senile dementia, she seemed to live in the past, and ordinarily had little regard for the present. As the insanity dated from the ovarian operation, it was deemed advisable to try the administration of ovarian tissue as a sort of forlorn hope. It did not seem likely that much benefit could result, as the ovarian function, as we understand it, must long ago have ceased to be of importance; still, in view of the fact that we do not fully understand the complete functions of many of the glandular structures, the experiment was of interest. Eight-grain doses of ovarian tissue were given three times a day, and at the same time special attention paid to the bowels, as the insanity was so clearly toxic in its origin. The urine was, as might be expected, heavily loaded with indican. The immediate results of treatment were promising, and the patient apparently quite rational in a day or so; began to knit and sew and recognized those with whom she was acquainted before the attack of insanity. The improvement was merely transitory, and in a few days it was found that the treatment would have to be discontinued, as it apparently caused marked disturbance. The temperature reached 102.2° , the pulse was rapid, tongue dry, patient dull and stupid. The urine was offensive and loaded with indican. After the ovarian tissue treatment was discontinued the patient became more stupid for a time and then brightened up, alternations between comparative sanity and marked delirious mania continuing until the end. This is not the course of disease in typical cases of alternating insanity, where the rule is to find long periods of excitement alternating with periods of melancholia, or, perhaps, quiet. In the patient referred to the attacks of excitement were most intense while they lasted; the periods of quiet marked by wonderful lucidity.

The second case is equally interesting:

J. M. Age, 43. Of poor physical type, having been weak since childhood, an attack of scarlatina being mentioned as the origin of deafness from which she suffers. Admitted September, 1897. I knew the patient some years ago, and at that time she

was hysterical. When admitted to Rockwood her insanity was said to be of two months' duration, and the cause a surgical operation. This operation was the removal of a bleeding sub-mucoid fibroid uterine tumor, which the operator says in his medical certificate "was undermining the patient's health by the loss and stinking discharge." Immediately after the operation she became incoherent and disconnected in conversation, and when brought to Rockwood was in a condition of delirious mania—talked incessantly and incoherently; was flushed, restless and excited. This condition of excitement persisted for a time and the patient exhibited all the indications of toxæmia, failing rapidly. When she was admitted her weight was ninety-six pounds, but by October 30 it had declined to eighty-five pounds; her tongue was heavily coated, sordes present, pulse weak, and death from exhaustion imminent. Obstinate constipation was present, and laxatives always induced mental improvement. Indican was increased in the urine. Gradually, under careful nursing, slight improvement took place and alternations between marked excitement and comparative lucidity began to occur, and at the time of writing the patient has made such an advance towards recovery that she has been able to return to her friends. Menstruation has been re-established and the normal weight regained. The case was clearly one of auto-toxis.

Unfortunately, notes of several cases of insanity occurring after surgical operations, which have come under my observation, have not been preserved, but in nearly every instance they were the outcome of operations on the female generative organs and the type of insanity almost invariably acute delirious mania. Four or five of the cases developed after operation for lacerated cervix; one after removal of the uterus. In the majority a cure eventually took place, and the history in nearly all was that insanity occurred very shortly after the operation. Two marked cases of insanity in men after operations have come under observation; one developed hysteric epilepsy, the other acute delirious mania. The operations were performed for injuries to the leg and foot in each case.

There are very few statistics on which to base a post surgical type of insanity, but of thirty-three cases reported by Dewey 90% were females, 10% males. Of these nineteen were cases of operations on the female organs of generation; two abdominal

operations in females; three were for mammary cancer in females. The form of mental disease was mania, including acute delirious mania; in fact, no less than fourteen are so classified, thus agreeing with what we have observed in Rockwood Hospital.

PROPHYLAXIS OF ARMY TYPHOID.*

By S. OSCAR MYERS, M. D.,

Mt. Vernon, N. Y.

Mr. President:

In presenting what the secretary has designated "a paper" I feel that I must offer an apology for its imperfections and fragmentary character.

The title given on the card, viz., "Prophylaxis of Army Typhoid," should have read, if there had been sufficient room on the card, something as follows: Whereas, the great majority of cases of typhoid fever that have occurred among the American soldiers were caused by their drinking water that contained the bacillus typhosus, therefore, the government should do its utmost to supply drinking water that is pure and uncontaminated. To the average military man, and particularly to those junior officers who have worn gold braid, shoulder straps or other military gewgaws but a few months, it will doubtless seem presumptuous that a civilian in plain, unstriped trousers, and whose knowledge of war scarcely enables him to distinguish between a "flat trajectory" and a "*cheval de frise*," should presume to offer suggestions or make criticisms concerning the conduct of a war.

The writer, however, is one of 70,000,000 American sovereigns, who claims to possess the full average amount of patriotism and interest and devotion to everything that pertains to the welfare and progress of the fairest and greatest country that exists or ever has existed. I disclaim any captious criticism or disposition to detract the least jot or iota from the magnificent results achieved. I accord the fullest credit to all concerned, from President McKinley down to the "missing" private whose unburied bones lie hidden in some tangled thicket before Santiago. I claim the right and privilege, however, as a medical man with a fair knowledge of hygiene and sanitation, to watch, criticise and suggest on such matters as concern the physical welfare

* Read before the Jenkins Medical Society, October 13, 1898.

of the American soldier. The whole ground is too large to cover in this brief paper. There is much that might be said about food, clothing, medical treatment, etc., but I limit this discussion to drinking water and its results.

I have no array of statistics to present. Just how many cases of typhoid have occurred in the army and are still occurring, I cannot say. The time has not yet arrived for accurate reports from those in authority. It is unnecessary, however, to know the exact number. Reports have reached us through the public press, not only of those of icteroid hue but of polychromatic tints and shades, of scores and hundreds of cases. The military hospitals have been overcrowded and hundreds of eleemosynary institutions have opened their doors to the soldier sick with typhoid. We have seen with our own eyes. Everyone of us has been called upon to treat one or more cases. Less than 400 lives have been lost in battle and from wounds. Two thousand five hundred American soldiers, picked from thousands for their physical perfections, have died from disease, the great majority from typhoid. The great majority of these deaths from typhoid occurred—not in the pestilential trenches or on crowded warships, of tropical Cuba or far-off Manila, but here, under the blue summer skies and in the pure, wholesome air of our own beautiful country—in camps selected from millions of square miles of territory—selected by men whom we have respected and revered for their knowledge and reputation as authorities on all that pertains to the causes and prevention of typhoid and kindred diseases. And yet scores and hundreds of cases have occurred, and in too many instances a healthy, robust young life has been ended, and the last report of the case has been made by the firing squad over a soldier's grave. A hundred, or even a decade of years ago, it might have been sufficient to say, "These things are no more than we could expect. They belong to war and are inevitable." These statements were truths when Napoleon's frozen army retreated from Moscow, when Washington starved at Valley Forge, or even when our own country was rent by civil war. To-day, with our increased knowledge of typhoid, its causes and prevention, they are untrue platitudes and only fit for covering ignorance, incompetence and neglect. In civil life one of the very highest authorities, recognized by all of us as such, has deliberately written, that "in every death from

typhoid fever some one has committed a crime." If this be true in civil life, is it not more so in the army, where everything is under supervision?

The civilian is practically free to eat, drink and do what he pleases. The soldier is a part of a great machine under the absolute control of a superior. His eating, drinking, sleeping, down-sittings and uprisings are governed by someone besides himself, and for his physical welfare that someone is responsible. If he gets typhoid it is due to lack of knowledge and care of his superior. It is superfluous to enter upon a discussion of the etiology of typhoid. It is sufficient to state that, although insects and personal contact may convey the bacillus, nine cases out of ten are caused by contaminated drinking water. This is in accordance with experience and the teachings of the best authorities of the present day and needs no further elucidation. Thousands of soldiers were encamped along the San Juan river. They bathed their bodies, laundered their clothes, drowned their pediculi, urinated and defecated on its banks and drank its water. At Camp Wikoff men and horses drank from a pond and afterwards from wells situated in the midst of privy vaults and innumerable slop holes, in a porous soil that was undrained and unsewered. At Chickamaugua a spring that was much frequented by the soldiers was but twenty feet from a "sink hole." I asked the soldier who gave me this item of information to describe a "sink" and its contents, and never before did I hear a description of such utter, abhorrent, loathsome nastiness. With drinking water from such sources is it any wonder that many contracted typhoid? The wonder is that any escaped. A wise and skillful general protects his men from injury by shot and shell by forts, bomb proofs, embankments and trenches. Thousands and millions of dollars are spent upon defensive fortifications. Bad drinking water has killed six men where bullets have killed one, and I insist that it is the duty of the government officials to provide, not "fair" or "potable," but the very best, absolutely clean water for the American soldier to drink. If it is worth while to spend time, skill and unlimited thousands to protect the soldier from injury by bullets, it is six times as necessary to protect him from the bacillus typhosus by giving him clean water.

That this cannot be done by relying upon ponds, streams,

wells and springs in the vicinity of camps, both temporary and permanent, has been clearly demonstrated. However pure and clean the water in these may be when the sites are selected they are sure to become contaminated and rendered dangerous. If the water is boiled it may be made safe to use, but if the boiling is left to the discretion of the men it will always be a failure. Officials having the proper authority should not only request, but should *order*, and with an iron hand see obeyed directions that the men have proper drink as well as proper arms. Polluted streams and wells should be guarded like pest houses or powder magazines. If boiled water can be produced and furnished, the men will be comparatively safe, but the fact that pond and river water is sometimes brackish or alkaline, or contains other impurities which boiling does not remove, militates against this process. After thought and study of the subject I am convinced that the only safe way is to plan for and furnish distilled water. That this can be done in every permanent camp is so self-evident that it requires no argument. It has been and is being done in civil life everywhere, and is a practical success. Since distilled water is the only absolutely sure and reliably clean water it should be provided in every instance. In regard to supplying men on the march or in temporary camp the problem is difficult, but it can be solved. I have made careful inquiry of competent engineers who have given me the following statements: A distilling apparatus of 2,000 pounds weight, that could be easily drawn by one horse on a decent road, or two horses on a bad one, can produce 20 tons of distilled water in 24 hours, or 120 gallons per hour. A small apparatus weighing 30 pounds, not too heavy for one man to carry and handle, can distil 25 gallons in 24 hours. Allowing 3 quarts per man per day, the apparatus being in use 12 hours out of 24, the larger machine can supply over 1,500 men with pure, clean drink daily. The small apparatus, which I here exhibit, which can easily be carried from camp to camp and managed by one man, could supply thirty men. These statements I have gathered from reliable authorities and know them to be correct, and I cannot see why it is any more impracticable to supply clean water to soldiers on the march, or even in battle, than to supply them with food or ammunition. I hope and trust that I have demonstrated the theorem I first stated, viz., that the American soldier is entitled to and should receive clean water to

drink at all times and in all places. Of course all of this would entail much time, trouble and expense, but when we recollect that over 50 per cent. of the deaths were caused by bad water, the value of an American soldier's life, the unlimited resources of our government, the loyalty, patriotism and devotion of all of us to our country and the banner of the stars and stripes, is it not worth while?

109 S. FOURTH AVENUE.

For the ANNALS.

ADDISON'S DISEASE IN CHILDREN, WITH THE REPORT OF A CASE.

By AUGUST JEROME LARTIGAU, M. D.,

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AND

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Thomas Addison of Guy's¹ Hospital, in 1849, first publicly, and again in 1855,² called attention to a previously unrecognized symptomatic presentation of such constancy as to constitute a clinical entity, to which subsequently Trousseau³ gave the name "maladie d'Addison." The recognition of the remarkable association of adrenal disease with this interesting symptom-complex, to which Addison was for a time constrained to refer as "idiopathic anæmia," was the fruitful result of critical post-mortem investigations of this class of cases. Since the publication of these researches, a wealth of confirmatory evidence has been adduced to prove the pathologic importance and clinical exactness of Addison's studies. The comprehensive terseness of his definition to this day serve to define the pathologic scope and clinical perspective of this disease: "The leading and characteristic features of the morbid state to which I would direct attention are, anæmia, general languor and debility, remarkable feebleness of the heart's action, irritability of the stomach, and a peculiar change of colour in the skin, occurring in connection with a diseased condition of the suprarenal capsules."

The following case was brought under the observation of one of us clinically; and the report of the case, with the pathologic

findings seem to us worthy of publication as an additional contribution to the study of Addison's disease in children.

L. S., orphan boy, 12 years of age, was first seen on November 23, 1897, complaining of great weakness. Both parents died of tuberculosis of the lungs. The past history is somewhat uncertain. The boy began to feel ill about five or six weeks ago with a general "tired feeling" and weakness, a condition which gradually increased in degree. The appetite had decreased so much that at this time the patient ate but very little. Vertigo had been a frequent symptom, and the dyspnœa pronounced on very insignificant exertion. No history of cough could be obtained, but vomiting had been considerable at times, no relation apparently existing to the presence of food in the stomach.

The following is abstracted from the notes at the time of the first examination:

"The child is a small boy for his age, dark hair, considerably emaciated, and fairly symmetrical in build; intelligence is good. Temperature 97 degrees F; pulse 130, weak, tension low and irregular. The skin, although universally dark, shows diffuse areas of grayish copper discoloration, the exact limitations being somewhat uncertain, owing to a very gradual transition from the abnormally pigmented areas to the normal skin. The pigmentation is more evident on the backs of the hands, forehead, temples, nose and nipples; the scrotum and penis present an ashy chocolate hue. The mucous membranes show no pigmentary implication. The skin is generally glossy, smooth and inelastic. No glandular enlargements can be detected about the neck, groins or elsewhere. The heart sounds are weak but normal; the spleen is somewhat enlarged, and the remaining abdominal viscera are normal. The thyroid gland and lungs are also normal. No apparent sensorial disturbances; and the reflexes show no change from the normal."

During the following two weeks, the patient was confined to his bed without any change in his condition; the temperature remained subnormal except for three days, when it reached 102 degrees F. During the succeeding three or four weeks, the pigmentation increased until the pigmented portions finally were of a deep brown color on the hands and face, and almost black around the nipples. Blood examination demonstrated a severe secondary anæmia. The patient, during this period, was given arsenite of potassium in increasing doses, beginning with one-

fortieth of a grain until he could take one-third of a grain three times a day. During January, 1898, the child improved, vomiting became less frequent, temperature was normal, pulse remained weak, and between 80 and 90 per minute. The dyspnœa was not so evident. This amelioration continued, and in February he returned to school apparently quite well, with the exception of the pigmentation, which had somewhat increased, but the borders were still ill-defined. The improvement continued during the succeeding two months, the pigmentary deposition always increasing in degree. On May 1, 1898, at 6 A. M., a hurried call was demanded, and on arriving, the patient was found unconscious, pulseless and in eclampsia. In spite of the most active stimulation, he died at 10.30 A. M.

The autopsy was made ten hours after death, and the following are some of the notes from the autopsy record:

Body 140 c. m. long, moderately well built and somewhat emaciated. Rigor mortis well marked in both extremities. Post-mortem lividity of the dependent parts. Pupils dilated and equal; mucous membranes of eyelids and lips pale; conjunctivæ free from icteric discoloration; skin of the body is of general brownish color, which in places assumes a much deeper yellowish brown (copper) hue and occurs in irregular, not sharply circumscribed and variously sized areas on the forehead, neck, outer aspect of both thighs, groins, back of hands and nipples. Mucous membranes show absolutely no evidences of pigmentary deposition. No subcutaneous œdema about the ankles. Subcutaneous fat, small in amount, and pale yellow in color. Muscles of thorax and abdomen poorly developed, pale brownish red color.

Peritoneum.—Both layers smooth and free from injection; cavity free from any excess of fluid; omentum thin, delicate and contains a small amount of fat; omental glands not enlarged; foramen of Winslow patent; diaphragm, right side, fourth space; left side, fifth space, in the mammary lines. The appendix measures eight c. m., long; passes from the tip of the cæcum directly downward and inward into the pelvic cavity; free from adhesions, and has a mesentery for its entire length. The left lobe of liver reaches three fingers' breadths below ensiform tip; stomach well hidden behind the costal margins; retro-sternal glands not enlarged.

Both pleural cavities free from fluid.

Heart.—Both sides moderately distended with blood. Right heart contains fluid blood and red and chicken fat post-mortem clots. Endocardium normal in appearance. Tricuspid orifice measures 8 c. m. in circumference. Valve free from thickening; margins thin and delicate. Pulmonary orifice measures 5 c. m. in circumference.

Left Heart.—Endocardium presents a similar appearance to that of the opposite side, except in one portion of auricular endocardium just above valve, where it shows a pea-sized, slightly raised yellow patch of fatty atheroma. Mitral valve slightly thickened along its free margins; otherwise normal in appearance. Mitral orifice 7.5 c. m. in circumference. Aortic opening measures 6 c. m.; aortic leaflets thin and normal. Aorta just above the leaflets shows no apparent abnormality. Heart muscle firm in consistency; on section presents a homogeneous, pale, reddish-brown color. Average thickness of left ventricle is 1 c. m.; average thickness of right, 5 c. m.

Left Lung.—Bound down laterally and posteriorly by moderately firm adhesions. Both layers of pleura smooth, except where the remains of torn adhesions exist. Inter-lobular pleura adherent. Both lobes crepitant; lower one distinctly less so than the upper. On section the lower lobe presents a homogeneous brownish-red granular surface from which exudes a small amount of frothy blood-stained serum. The upper lobe is pale pink in color. Bronchial mucous membrane slightly congested; lumen contains a small amount of sanguineous colored mucus. Large and small bronchi uniformly affected. Pulmonary vessels normal.

Right Lung.—Presents a similar appearance to its fellow.

Spleen.—Adherent to abdominal wall by a few firm bands of connective tissue. Capsule smooth, except where remains of torn adhesion exist. Organ considerably enlarged and measures 12x9x3 c. m. Consistency softer than normal. On section trabeculæ not increased in amount; spleen pulp moderately augmented; malpighian bodies prominent.

Liver.—Adherent posteriorly to diaphragm. Capsule smooth. Organ measures 21x19 c. m.; across right, 13 c. m., across left lobe, 9 c. m., in thickness. Consistency moderately firm. On section liver presents a homogeneous deep reddish-brown color; lobules indistinct; the finer strands of connective tissue appear

somewhat increased. The organ is uniformly cloudy. Portal vein normal.

Gall-Bladder.—Moderately distended with small amount of bile. Mucous membrane bile-stained and normal. At hilum of the organ is observed a single enlarged lymphatic gland which is quite firm in consistency, and which on section is markedly hemorrhagic.

Left Kidney.—Fatty capsule moderate in amount. Fibrous capsule strips off with moderate ease, occasionally tearing away bits of renal tissue. Remains of the foetal lobulations still visible; stellate veins prominent. Consistency of kidney somewhat softer than normal, and on section the organ is of a reddish-brown color; cortex of uniform thickness, and normal in amount; cortex markings visible; glomeruli prominent and congested; medulla normal; mucous membrane of pelvis normal.

Right Kidney.—Presents a similar appearance to its fellow.

Adrenal Glands.—Both organs enlarged. Consistency very firm, and on section the knife grates, owing to calcareous depositions. Appearance of surface on section is similar in both adrenal glands, and consists in a mottling due to diffuse areas of yellow, suggestive of caseous material; elsewhere the surface presents a yellow-brown color. *Mesenteric glands* enlarged, as well as the retro-peritoneal glands, which are even more so than the mesenteric. On section some show caseous change; others contain hemorrhages.

Both ureters, stomach, aorta, larynx, trachea, œsophagus, testicles and prostate are normal in appearance.

Small Intestine.—Mucous membrane smooth; free from injection; solitary follicles markedly prominent in ilium, especially in the vicinity of the ileo-cæcal valve. The *large intestine* shows areas of patchy congestion.

Histologic Examination of the Tissues.—Microscopic examination of the heart, lungs, spleen, pancreas and kidneys, added practically nothing to the macroscopic findings.

Liver.—The capsule of the liver is not increased in thickness, but on it there lies a small amount of granular material, taking the eosin stain, and in which may be seen a number of cells of an epithelial character, and an occasional polynuclear leucocyte. The connective tissue of the organ, although showing no increase as a whole, yet shows a very marked cellular increase in the portal

spaces. Everywhere throughout the section, the character of the cells, constituting this increase in the portal spaces, consists of small round cells, sometimes oval or spindle-shaped, the nuclei of which take the stain very sharply. In a few places in the section outside of the portal spaces, and in the liver cells proper, are noticed a few variously sized areas of cell accumulations. They are few in number; bear no relation to the portal space, and are always less than one-fifth of a lobule in size. Peripherally, they are made up of a zone of small round cells, in this manner very sharply defining these areas from the surrounding hepatic tissue. The more central portions of these areas are made up of larger sized and irregularly elongated cells, the nuclei of which take the stain far less intensely than the preceding cells, described as forming the periphery of the lobule. Morphologically these cells are of an epithelioid type. Between them may be seen a diffuse, granular material, the remains of some necrotic hepatic cells, and a small number of small round cells. In various portions of the central zones may be seen oval, giant cells considerably larger than any of the cells described — typical giant cells of Langhans. The central veins are not dilated, nor are the surrounding capillaries. The liver cells are about normal in size, and their nuclei stain well; protoplasm free from pigment, somewhat granular, but otherwise normal in appearance. The bile and blood vessels show no apparent deviation from the normal.

Intestines.—The serous coat, as well as the muscular and sub-mucous, appears perfectly normal. The mucous coat has in places almost completely disappeared, there remaining only in such places usually a few of the glandular elements. Elsewhere the mucous membrane shows slight desquamation of its superficial layers, and the surface is covered with a granular débris, containing epithelial cells. The solitary follicles are considerably enlarged, owing to a very marked increase in the lymphoid elements. The intestines show no other apparent changes.

Right Adrenal.—The medullary portion of the organ is largely occupied by more or less circumscribed, sometimes diffuse areas of calcareous material, which take the eosin stain. These calcareous masses are generally homogeneous in structure. In the remaining portion of the medulla, and in the cortical portion of the organ may be seen diffuse extensive areas, containing small round and elongated cells, the nuclei of which stain faintly and corres-

ponding in their morphology to epithelioid cells. Among them are small round cells. In this tissue now and then may be seen a small number of giant cells of the Langhans type. In addition to this tissue, the other portions of the section show areas of caseous degeneration. A good many sections from this adrenal have been stained by Zeihl-fuchsin method for tubercle bacilli; and of some eighty sections examined, only in two could an extremely scanty number of tubercle bacilli be made out.

Left Adrenal presents changes, quite similar to those observed in the right gland. The disease, however, in this gland is less extensive than in its fellow. The search for tubercle bacilli showed the same scantiness of the specific organism of tuberculosis.

Note.—Sections of the liver have likewise been stained for tubercle bacilli by the same method, and demonstrated in some of the tubercles described in the microscopic description.

ETIOLOGY.

At one time, Addison's disease was thought to be restricted to adult life, but since then there have been reported a certain number of instances of its existence in the young. It has been observed in almost every year of life, from practically birth to the eighty-first year. Dr. Addison's paper⁴ contains the report of eleven selected cases occurring in adults, the youngest of whom was nineteen years old. Not long after the publication of this paper, Startin⁵ published the history of a case in a child twelve years of age; in 1878, Monti⁶ collected eleven instances in children under fifteen years old. Baginsky⁷ likewise mentions several cases in children, and Comby⁸ in a recent article, cites twenty-three observations of this character. Grube,⁹ in 1897, published the history of an additional case in a boy seven years of age; J. S. Berry^{9b} in the same year recorded the case of a girl thirteen years old, and finally H. Dezirot¹⁰ in a late thesis, has added three new cases studied by him. From all the literature extant up to 1897, this writer has succeeded in collecting but forty-eight cases inclusive of his own: one occurred in an infant seven days old, another in a child three years old, and the remainder between the ages of ten and sixteen. The disease is extremely rare under ten years, rare under thirteen, and from that becoming more common as the age advances.

No exact data have been published upon the influence of climatic conditions to the production of the malady, but it is strongly doubted if climate plays any important role. The influence of race is probably likewise unimportant; and that of heredity is questionable. With regard to this point, the remarks of Rolleston are not without interest. This observer says it does not seem proved that this disease is more frequently seen in tuberculous families, or that it is in any way hereditary. Regarding the latter question, the observation of Andrewes,¹¹ who has reported the occurrence of the disease in two brothers, and the two cases recorded by Schwab¹² in one family, are extremely suggestive of such a possibility. Sex plays some part in the determination of the disease in children as well as in adults. Of the 48 cases collected by Dezirot, 29 (or about 60%) were males, and 19 (about 40%) females. These are practically the same figures given by Greenhow¹³ in his list of 193 tabulated cases in adults; 125 (65%) occurred in the male sex, and the remainder (35%) in females.

Greenhow laid considerable stress upon the etiologic importance of traumatism in the development of adrenal disease; but only in very rare instances could Dezirot, in his series, establish any apparent connection between the production of the disease and some traumatic influence. It has been thought by some writers that the vitality of the adrenals becomes markedly affected through the occurrence of hemorrhages into these organs, thus rendering them vulnerable to the tubercle bacillus. Hemorrhages into the suprarenal capsules, probably due to trauma, were found in 26 out of 130 still born children examined by Dr. Spenser.¹⁴ Basing their assumption largely upon these observations, some writers have insisted upon the predisposing influence of hemorrhage in the production of tuberculous or other disease of the adrenals. Tuberculosis of the suprarenal capsules is often secondary to some tuberculous process elsewhere, but more particularly to pulmonary phthisis and Pott's disease.¹⁵

PATHOLOGY.

Careful post-mortem studies of cases of Addison's disease in adults and children, have demonstrated a very striking implication of the adrenal glands, with various lesions, but more particularly of a tuberculous nature. The pathologic findings in the adrenal glands, although to some extent variable in their nature, never-

theless, in the majority of cases, present lesions whose nature is sufficiently constant to, although not absolutely, constitute a pathologic entity. Dr. Wilkes¹⁶ argued for the absolute unity of the lesions, and Greenhow¹⁷ likewise made such a contention, which at the present day, however, lacks both anatomic and clinical support.

The fibro-caseous lesion, which is by far the most common alteration observed, was well recognized by Addison. Lewin,¹⁸ in his critical papers on this disease, found that 74% were affected with tuberculosis of the suprarenal bodies; Gilman Thompson¹⁹ in a later article, gives 80% as the frequency of tuberculous involvement of these glands. These figures, if based on the autopsy investigations of children only, would in all probability still be too low. Although the adrenal disease is usually secondary to tuberculosis elsewhere in the body, yet primary involvement is well known through the investigations of a number of writers. Unilateral disease is less frequent than disease of both glands.

The involved organs are usually increased in size and weight, not infrequently irregularly distorted in shape, adherent to adjoining structures, and of a yellowish or grayish-yellow color. The consistency is firm. Sometimes instead of an augmentation in size, the suprarenal glands are found small. Cases have been recorded in which the enlarged adrenals were transformed into veritable abscesses, containing thick purulent or caseous material. The fibro-caseous process usually commences in the medulla, and extends thence into the cortex, until very often the entire organ is involved. The cortex has been described as the seat of primary infection in some instances. Miliary tubercles appear in the medulla, and extension takes place by increase in size, finally coalescence, and in this manner frequently replace the entire organ, or large portions of it. It is highly improbable that caseous material is ever absorbed or disappears;²⁰ when the lesion is old, fibrous tissue develops around the caseous areas, which from calcareous infiltration may become cretaceous; more rarely the caseous masses soften and form abscesses.

The tuberculous nature of this lesion has repeatedly been demonstrated by various pathologists; but the demonstration of tubercle bacilli is generally difficult and extremely tedious, but inoculation of portions of the diseased glands into guinea-pigs is almost invariably followed by an experimental tuberculosis. It

should be borne in mind, however, that the fibro-caseous lesion is not invariably of this nature, as shown by Delepine,²¹ who failed to produce tuberculosis in a guinea-pig by introducing portions of the diseased gland from a case which succumbed to Addison's disease. It must not be supposed from what has been said, that tuberculosis of these structures invariably results in this malady. The existence of tuberculosis without any symptoms of the disease has been repeatedly demonstrated by pathologists and others. Gilman Thompson,²² in his paper, mentions a considerable number of cases of this kind, and Alezais and Arnaud,²³ Rolleston,²⁴ Brinton,²⁵ Collier,²⁶ Cagiati,²⁷ and one of the writers have made similar observations.

Among the less common lesions occasionally found, are simple atrophy, malignant disease and hemorrhage. The latter was the only change which could be made out in the adrenal glands of some cases of Addison's disease in very young children. Finally in a rare class of cases no alteration of the gland can be demonstrated, but more or less pronounced changes of variable nature have been made out in the semilunar ganglia and abdominal sympathetic nervous system. These for the most part consist in atrophy and fatty degeneration of the nerves and ganglia, pigmentary atrophy of ganglion cells and thickening of their capsules, etc., a series of lesions, sometimes limited to the ganglia, at other times to the nerves of the suprarenal bodies, and in still other cases, the abdominal sympathetics are so profoundly altered that the process may extend to the cord itself. Similar processes have been described in cases not the subject of Addison's disease.

Other organs are at different times known to be affected in this disease. In children, according to Dezirot, alterations of the mesenteric glands are much more common than in adults, 25% of the cases in the young showing disease, almost invariably of a tuberculous nature. In about one-eighth of all the cases occurring in children, Peyer's patches are found swollen and splenic enlargement occurs in 11% of those affected; implication of the thymus gland has been recorded in three instances of this class of patients.

The pigmentation consists in an exaggeration of the normal amount of pigment which microscopically is found in the cells of the stratum malpighii, the more superficial layers of the epidermis being quite free from pigment. The upper strata of the

dermis contain "carrier cells" which by many it is thought convey the pigment from the blood vessels of the dermis to the stratum malpighii. These wandering cells are especially found around the blood vessels of the dermis, where they absorb the pigment which, chemically, consists of changed haemoglobin.

The interpretation of the causative factors determining the appearance of the curious train of phenomena constituting Addison's disease has been so varied, and of recent years led to so much contention, that investigations in the physiologic domains of the suprarenal glands have received a very unusual and important impetus, the immediate result of which has been a more scientific conception of the pathogenesis of this disease. The experimental researches of Brown-Sequard²⁸ long ago demonstrated that death followed extirpation of the adrenal bodies in animals, an observation since confirmed by a multitude of investigators. Through the experimentation of Auguste Petit,²⁹ Szymonowicz,³⁰ Abelous and Langlois,³¹ Tizzoni,³² Dominicus,³³ Oliver and Schafer,³⁴ and others, it has been conclusively shown that the adrenal glands are physiologically active, and chiefly so by the elaboration of a secretion the absence of which leads to profound disturbances of the healthful equilibrium.

In the light of recent experimental evidence, two chief theories have been advanced, one the theory of suprarenal inadequacy, and the other the theory of trophic nervous influence. The first view, which has received more general acceptance, assumes that the symptoms observed in this disease are the ultimate result of functional suppression on the part of the suprarenal capsules. The exact *modus operandi* must as yet continue an open question. The other hypothesis would explain the nutritive disturbances as the result of altered tissue metabolism, influenced by nervous causes, and the circulatory, respiratory and digestive disturbances by implication of the pneumogastrics. The advocates of this view believe that it receives support in the fact that pigmentation often follows tuberculosis of the peritoneum, cancer of the pancreas, and aneurism of the abdominal aorta, as the immediate result of changes in the abdominal sympathetic nervous system.

(To be concluded.)

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For the ANNALS.

A CASE OF SPINA BIFIDA TREATED BY EXCISION — RECOVERY.

BY WILLIS G. MACDONALD, M. D.,
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The following case is apparently of sufficient interest to merit a clinical report:

Fred'k P., a male infant aged four months, was presented by his parents for treatment at the surgical clinic of the Albany Hospital early in the summer of 1898. The condition for which relief was sought was a tumor situated in the lower lumbar region in the median line. Inspection revealed at once the condition — spina bifida. The fluctuating tumor was a little more than four centimetres in diameter and fourteen centimetres in circumference, or about the size of an orange. It was covered by natural

skin at the base, but the superior portion had a very thin, translucent membrane as a covering. When the infant cried or struggled, the hyper-distention seemed sufficient to rupture the sac.

The family history given presents no congenital defects or malformation in other members. The father stated that at the time of birth the tumor was much smaller, and has increased rapidly within a few weeks. Further examination showed a healthy, well-developed infant, free from other deformity, paralysis, or hydrocephalus. The legs were especially strong, and the functions of the rectum and bladder properly performed. From the general condition of the child, the absence of foot deformity and paralysis, I assumed that the tumor was a pure meningocele, or very nearly approached it. The mother was nursing the child. The weather was very unfavorable to infants. The following advice was given: To watch carefully the tumor, and in case of serious inflammation or rupture, to return at once to the hospital. If, on the other hand, the condition was not seriously aggravated, to keep the tumor clean and dry, and postpone more radical treatment until the child was older and conditions more favorable. A mild solution of alum and borax was ordered as a wash, and carbolized talcum powder with absorbent cotton as a dressing. At the same time, an operation, excision of the meningocele, was urged when the child was nine or ten months old. On this plan of treatment being adopted, the local appearances improved, although the tumor continued to increase in size. In October, 1898, the parents, through the advice of friends, visited another clinic for consultation. The surgeon in charge referred in no very complimentary terms to my proposal of excision of the spina bifida, making the rather broad statement that he had never known of a recovery from such an operation, and creating, innocently enough upon his part I am sure, the impression in the minds of the parents that I had no very high regard for human life and was given to experimental surgery on occasion. His final advice was to return home and do nothing.

The child, with its mother, entered the Albany Hospital for treatment November 13, 1898. Assuming my confrere was not familiar with the recent work of Mayo Robson,¹ Roswell Park,² Marcy,³ Herrick,⁴ Van Hook,⁵ Nicoll,⁶ and the more recent conclusions of Hildebrand,⁷ after an exhaustive statistical study of

the subject in which the advantages of excision are clearly demonstrated, I saw no reason for changing my opinion. After a very careful re-examination, the operation was done November 16, 1898.

The usual aseptic preparations employed in our clinic were made, with the exception that the skin of the patient was purified on the table. However, we were not unmindful that operations on the spinal cord are technically more exacting than those in the abdomen or involving joints. Flaps of skin and subcutaneous fat were raised sufficient to cover the defect. The sac was incised laterally and the opening communicating with the spinal cord immediately plugged with sterile gauze. No nerves being found in the walls of the sac, it was dissected free, the neck closed by fine catgut sutures and removed. The communication with the vertebral canal was not large and seemed to require no special attention. The deep fascia was brought in apposition by buried catgut sutures. The remainder of the wound, now dry, was closed with silk worm-gut, covered with many layers of silver foil and sterilized gauze. In order to prevent infection from the discharges, a large sheet of rubber dam was fastened across the buttocks by adhesive plaster and the lower border painted with celluloid cement. The dam was carried up over the dressing and non-absorbent but sterilized cotton placed about the buttocks. The child was now fixed in a Sayre wire cuirass and put to bed with the head elevated in such a manner that all discharges gravitated away from the wound. I regard this dressing and fixation as very important in preventing subsequent infection of the wound. The child suffered little from shock. There was a slight elevation of temperature (highest, 101° F. rectal), and pulse, with great restlessness for forty-eight hours. Since, the subsequent history is uneventful, the wound healing by primary union. The child has been good-tempered and has taken its nourishment well. After the wound is soundly healed the site of operation will be protected for some months by a celluloid shield.

More recently the mortality of excision for spina bifida has been materially reduced; now scarcely exceeding twenty per cent in a rather large series of cases. An unfortunate personal experience with the injection method of Morton and some considerable observation of cases treated by others by this method, lead me

to the conclusion that in properly selected cases, excision after the sixth month is the preferable method of treatment, and that in emergency (early sloughing or perforation of the sac), it may be done successfully at an earlier period of life.

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Clinical and Pathological Notes

Primary Colloid Cancer of the Pancreas.—On September 30, 1898, I was asked by Dr. J. R. Brown, of Seward, N. Y., to see with him a patient in consultation. Arriving there I met a Mr. A., fifty-four years of age, and weighing 225 pounds, who had been ill about three weeks.

His family history was negative. Both parents died at an advanced age, but he did not know of what diseases. One brother had died at fifty of valvular disease of the heart.

About September fifth he first complained of pain in his left shoulder and some distress after eating. His temperature and pulse were then normal, his tongue was coated, and he had little or no appetite. He had some dyspeptic uneasiness about his abdomen, but never anything that could really be called pain. There was slight distension after eating. On examination at that time no tumor could be detected on palpation, nor was there any evidence of fluid in the peritoneal cavity. His urine was normal in amount and chemical examination showed no albumen. Under treatment his tongue cleared up, and his appetite and digestion improved. About one week before death his temperature went up to about 99.5° , his pulse to 90, and both remained for some days at these figures.

Up to this time there had been a little area of dullness on the right side, apparently over the colon. Three days before death his abdomen began to enlarge, and gave a clear tympanitic sound over the whole surface. Treatment proved of no avail, and the

patient gradually went into a condition of collapse, the pulse and respiration running up rapidly, and the temperature increasing somewhat.

When I saw him on September 30 he was lying on his back in bed, with his head propped up pretty high; pulse thready, about 120 per minute. Four hours later it had run up to over 130.

His intellect was perfectly clear, and while he was not by any means hopeless, he was somewhat anxious about his condition. The surface of his forehead and hands was bathed in perspiration. The abdomen was enormously distended with gas, tympanitic at all points, there being no dullness on percussion, even low down at the sides. The heart sounds were all normal, as far as could be heard in a heart beating so rapidly. There was no dullness on percussion over the lungs, but there were numerous moist râles almost everywhere.

No accurate diagnosis appeared possible, but the man was evidently moribund and in precisely the condition that we see in shock from some injury to the peritoneal sac. The possibility was suggested of perforation from some unknown cause. The patient was sinking when I came away, and died about twelve o'clock noon the next day. The report of the autopsy by Dr. George Blumer, of the Bender Hygienic Laboratory, follows:

The autopsy was made forty-nine hours after death, the body showing some signs of post-mortem change. The following is the abstract from the protocol:

Anatomical Diagnosis.—Primary colloid carcinoma of the tail of the pancreas, with metastases to the peritoneum, omentum, lung, liver, spleen and kidneys; congestion and œdema of the lungs; slight coronary artery disease; brown atrophy of the heart, with fragmentation of the myocardium; general post-mortem changes. Body of a strongly-built, well-nourished man; well marked rigor mortis; post-mortem lividity of the dependent parts; abdomen greatly distended; subcutaneous fat large in amount, two centimetres thick over the abdomen.

Peritoneal Cavity.—On opening the peritoneal cavity, gas escaped with a hissing sound. The cavity contained about four litres of slightly blood-stained fluid. Both layers of the peritoneum, particularly the parietal layer in its lower portion, and the peritoneum covering the omentum, were studded with

tongue-like processes of new growth. These usually arose from a rather narrow base. They were of a grayish-pink color and lobulated. The omentum was enormously thickened as a result of this process, averaging four centimetres in thickness. The new growth was quite friable, and had in places the yellow translucent appearance and peculiar mucilaginous feel of colloid. Similar nodules could be felt on the peritoneal surface of the diaphragm, particularly on the right side.

Thoracic Organs.—The pericardial cavity and heart were normal, except for slight atheroma in the coronary arteries. Both pleural cavities contained an excess of blood-stained fluid. There was an old scar at the apex of the right lung, and at one point in the left lung a tumor metastasis the size of a large pin-head. The lower lobes of both lungs were congested and œdematous.

Abdominal Organs.—The spleen was adherent posteriorly to the abdominal wall and to a mass in the region of the tail of the pancreas. The organ measured 10.5x7x4 c. m. The capsule was wrinkled, except over one end, where it was distended by a swelling 4.5 c. m. in diameter. On section, most of the spleen substance appeared normal; the swelling above mentioned was due to the presence in the spleen substance of an almost spherical nodule 4.5 c. m. in diameter and of a yellowish translucent appearance. The liver was free from adhesions; its surface was thickly dotted with elevated grayish-yellow areas from two to twenty m. m. in diameter, many of them being distinctly umbilicated. On section, the organ contained numerous yellow translucent nodules from two to four c. m. in diameter. Post-mortem changes prevented the anatomical structure of the organ from being made out. There were numerous metastases on the walls of the gall-bladder. The kidneys showed post-mortem change. There were one or two pin-head sized metastases on the surface of these organs. The stomach was enlarged and showed chronic gastritis. The outer surface was covered, particularly along the lesser curvature, by pedunculated masses of new growth. The pancreas was surrounded by new growth of a similar character to that already described. On section of the organ, the head appeared normal. The tail was the seat of an extensive infiltration, with a new growth of dense consistency, and of a grayish-white color. The intestines were free from metastases, except those already mentioned on the peritoneal surface.

Microscopic.—The heart showed post-mortem change, with fragmentation of the myocardium. The lung showed slight emphysema, and evidences of œdema. The liver substance between the tumor masses was compressed and showed localized areas of vascular dilatation. The spleen substance was also compressed in the neighborhood of the tumor metastasis. The kidneys showed extensive post-mortem change. The new growth, both in the pancreas and in the other affected organs, showed much the same appearances. The degenerative processes were more marked in the infiltrated omentum and in the liver than they were in the primary tumor. The tumor was of an alveolar type, made up of masses of epithelial cells, between which a scant amount of connective tissue formed a stroma. The alveoli were usually small, the cells filling them also small, closely packed, and having a regular circular or oval nucleus and a rather large amount of protoplasm. In the primary tumor, but more markedly in the tumors of the spleen, mesentery and liver, the cells tended to undergo degenerative changes, resulting in the formation of an almost homogeneous material, which often took a light-blue stain with the hæmatoxylon, but which in places stained pinkish. This material corresponded in its appearance and behavior with stains to colloid. In many places the areas of colloid degeneration preponderated over the cellular elements.

REMARKS.—It is over two hundred and fifty years since Wirsung discovered the pancreatic duct and proved that this organ was a gland which poured its secretion into the duodenum. Up to a very recent date little more than this was known about it. Within the last few years a great deal has been added to our knowledge of its physiology. What we knew of its diseases had been based almost entirely upon facts obtained from post-mortem examinations. The reasons for this are easily to be found in the fact that the location of the organ is such that physical examination is almost impossible, except in the few cases in which it is very greatly enlarged. Its secretion can never during life be obtained alone, and the examination of the feces is not only so disagreeable, but also so intricate and unsatisfactory a matter, that comparatively little headway has been made in this direction. Still, in a certain class of cases, the presence of disease in this organ may be suspected when the decomposition

of the neutral fat in the stools is greatly diminished. The pancreatic juice seems to be the principal factor in splitting up the neutral fat into fatty acids and saponified fat. It is said also that the presence in the stools, in the absence of diarrhœa, of a large quantity of undigested muscular fibre is indicative of pancreatic disease.

Carcinoma is the most frequent form of tumor of the pancreas, but is more commonly secondary than primary. Men are more frequently attacked by it than women, and it is not known whether nitrogenous diet, trauma, or preceding diseases of the organ predispose to carcinoma.

In this particular case the four most characteristic symptoms of this disease, namely, constant pain, the cancerous cachexia, epigastric tumor and jaundice, were absent. Leo, however, says, "sometimes sudden death has been observed in persons who up to that time had been apparently in perfect health." Neither albumen nor sugar was present in this case, and emaciation was also absent.

There was nothing in the history of this case up to a few days before the patient's death to give even a hint that pancreatic disease might be suspected. It is to be regretted that the stools were not examined, but at a time when this was possible there seemed no reason for doing it.

This case seems worth recording on account of its rarity, and it is to be regretted that it throws no light on the diagnosis or treatment of such cases.

SAMUEL B. WARD.

Poisoning by Nitric Acid Fumes.—J. S. W., age 35. American. Fireman by occupation. On November 29, 1898, at 2 o'clock P. M., Mr. W. and several other firemen were called to a fire caused by the breaking of a carboy of nitric acid. They arrived quickly, and Mr. W. assisted a man who was badly burned by the acid to get out of the rooms. The fire was quickly extinguished and at the time none of the men felt any effects from the fumes of the acid; however, about six hours later, three of the men began to feel a rawness of the air passages, and compression of the right thorax—one vomited a little; but those symptoms all disappeared within twenty-four hours. The fourth man, Mr. W., about the same time, complained of severe pains in chest, and difficulty in swallowing and talking. He walked three blocks to his home

and was seen by Dr. C. H. Richardson and myself about 10.30 P. M.— eight and one-half hours after inhaling the fumes. There was marked dyspnœa, respirations were forty per minute, and very painful; voice husky; pulse 100, good quality; temperature elevation slight; pharynx very red; mucous membrane swollen; respiratory murmur high-pitched and harsh over bronchi and right lung, left lung not involved; some expectoration of bloody mucus. Unfavorable prognosis given. Sedatives and neutralizing inhalations prescribed. Patient again seen early next morning; patches of consolidation had developed in right lung with commencing œdema; slight cyanosis of lips, finger nails and ears, pulse rapid, but good in quality, patient rational, but at 12 M., when moved to the hospital he was slightly delirious. At three o'clock he became unconscious and very cyanotic; œdema marked in both lungs, left less involved than the right, mucus slightly tinged with blood ran constantly from the mouth; pulse rapid and irregular, temperature did not reach 101° F; œdema of glottis anticipated, preparations made to meet it by tracheotomy. Stimulants and inhalations of oxygen prescribed, pneumonia jacket and poultices applied to chest. Patient died at 7 P. M., twenty-nine hours after inhalation of fumes.

Few similar cases have been reported, though numerous deaths have followed the inhalation of the fumes of this acid. The only peculiar feature in this case was the long delay in the development of the symptoms. The same peculiarity existed in the series however. When a large amount is inhaled it is rapidly fatal — a broncho-pneumonia develops quickly, with subsequent œdema of the lungs, and death within twenty-four or thirty hours. Spasm of the glottis may occur immediately after inhaling the fumes and produce fatal asphyxia or œdema later, with the same result.

I desire to express my thanks to Dr. Richardson, by whose courtesy I am allowed to report the case.

HARRY S. PEARSE.

Correspondence

HEIDELBERG LETTER.

HEIDELBERG, *November 28, 1898.*

On last Tuesday the 512th Anniversary of Heidelberg University was celebrated. Professor Kehrer, of the medical faculty,

delivered the oration, and spoke on "Wounds and Their Healing." At the close the appointments for the year were read. In the medical department Dr. Bettman was given the lectureship in Syphilis and skin diseases. Dr. Bettman is Professor Erb's first assistant, and is a young man of great promise.

Professor Erb presented a very interesting case last week of a man of twenty-four who had been suffering with stomach trouble for three years. For the past two years vomiting and belching had been frequent, with occasional vomiting of blood. He had complained of great pain, and has had obstinate constipation for some time. The patient was quite emaciated and the abdomen was distended and peristaltic movements passing from the left to the right could be plainly seen. The stomach tube was inserted and three liters of fluid withdrawn. The stomach contents smelt sour and contained a great excess of hydrochloric acid. When the tube was withdrawn the abdomen was collapsed. On palpation no tumor of the pylorus could be detected.

The diagnosis was given as gastroptosis, with dilated stomach and stenosis of pylorus, due to cicatrix of gastric ulcer.

As a course of lavage and diet had not proved beneficial an operation was advised. The following morning Professor Czerny performed a gastro-enterostomy in a very skillful manner, and united the lower end of the pylorus with the stomach, by means of the Murphy button. It took but six minutes to do this after the stomach had been exposed. Six days after the operation the patient had no temperature and was taking a fair amount of liquid nourishment and a favorable prognosis was given.

Professor Czerny this past week diagnosed two cases of hepatic abscess, and in both pus was obtained on the first introduction of the exploratory needle and the patients afterwards underwent operations.

On November 26th and 27th was held the twenty-ninth annual meeting of the South Germany Psychiatric Society, in the Irrenklinik. A very interesting programme was provided. Professor Kraepelin read a paper on "The Diagnosis and Prognosis of Dementia Praecox," and Dr. Nissl spoke on "The Question of Periodical and Circular Insanities."

H. L. K. SHAW.

Editorial

Ἀσφαλὲς καὶ ἔμπεδον ἔστω τὸ σὸν ἔδος. Ἐκ σκότου μὲν ἔξαγε
φάος, ἐκ δὲ πάθους ἀναψυχὴν

*"Secure and Lasting be thy Abode! Out of
Darkness Bring forth the Light and out of
Suffering, Relief."*

With the change in administration of the ANNALS which occurred in 1897, the adoption of a motto to indicate the principles and aims of the publication was deemed a fitting recognition of a time-honored custom. A Greek inscription was chosen as representing most distinctly a University true to the traditions of the classical course, and because in the honored occupant of the chair of the Greek language and literature were to be found the sympathy and helpfulness always so abundant in the teacher of youth, and which have drawn to Prof. Whitehorne the affection and reverence of two generations of Union students.

The request for an inscription was answered by the Greek sentiment, which for two years has graced the title of our journal, and would fitly adorn the portals of our school — a constant stimulus to the highest scientific endeavor. The origin of the phrase was explained in a letter from Prof. Whitehorne, from which we reproduce the following:

"The history of the motto is a very simple one, and has no right to any such name. Ruminating over your request, the fancy struck me of a stranger in a strange land, attacked by a disease for which no name could be found, nor any apparent remedy; from which very fact the energies of the whole college were so stimulated to investigation that a discovery followed a new complication, remedy and recovery — all of which, I suppose, is in fact the object of the training pursued in a medical college; to eradicate the old, and to protect from the insidious approach of new diseases. I fancied then that the stranger, thus aided in an unhopèd-for manner, would, as he left his abode of refuge, cast his eyes thankfully upon the surrounding abodes of his helpers, and would utter for them some such words of trust and thankfulness as I have turned into Greek."

Wilhelm
Meyer

At the inauguration ceremony of the monument to Wilhelm Meyer, which took place at Copenhagen on October 25th, last, the address was delivered by Sir Felix Semon, of England.

Dr. Semon referred to the unusual occasion — the erection of a monument to a physician, explaining that even if scientific and progressive in his work, the physician rarely leaves much to the world beyond the kindly recollection of some friends and pupils, and a few complimentary obituary notices. The conspicuous merit of Hans Wilhelm Meyer, which has caused him to be singled out for this marked tribute, was described by Dr. Semon in the following words:

“It is now just thirty-one years since he was one day consulted by a girl, aged twenty years, who suffered from deafness, whose voice was most peculiar, and the expression of whose face was almost idiotic. Treatment directed to the ears and to the throat failed, and it was not until the puzzled observer one day introduced his finger into the space between the nose and throat that an unexpected solution was met with. Instead of penetrating into an open cavity, the finger was arrested by a large, soft, easily bleeding mass, a condition, the existence and nature of which, in those days, formed a *terra incognita*. Meyer succeeded in removing the mass by operation, with the result that the deafness was materially improved, the voice became natural, and the idiotic expression of the face disappeared. With the true instinct of a scientific observer, who develops what is ultimately to become an important truth from small beginnings, Meyer did not drop the clue which a casual observation had placed in his hands. He began studying the subject in all its bearings; he examined the masses he had removed with regard to their structure; and finding them to be glandular in character, gave them the name of “adenoid vegetations;” he investigated the results which obstruction of the space between the nose and throat exercises upon respiration, hearing, articulation, facial expression, and general mental and bodily development; he examined 2,000 Copenhagen school-children with regard to the frequency of this affection; he made himself the apostle of his own teaching by proclaiming it, not only in his own country, but also in scientific publications abroad.”

The
Question of
Vaccination

It is a notorious fact that the medical profession has at most times cherished some form of medical procedure, which has subsequently turned out to be a gigantic mistake. The long vogue of indiscriminate blood-letting is a well-known example of this, and many fads of lesser duration, such as the overuse of mercury so successfully satirized in *Gil Blas*, could be mentioned. Is vaccination another example of this kind? Mr. Alfred Russel Wallace, the veteran scientist, thinks that it is, and bases his opinion on a mass of carefully collected and thoroughly digested statistics. In his article on vaccination in his book "*The Wonderful Century*," these statistics seem to show with great force and clearness, that vaccination has not been responsible in any measure for the decrease in small-pox which has taken place during this century, but that this decrease has been due to our increased knowledge, and more perfect application of the laws of hygiene and sanitation. They further show, what would be expected if this is the case, that zymotic diseases other than small-pox show a decline in mortality equivalent to the decline in this disease.

It has frequently been stated that statistics can be "doctored" to suit the point of view of the observer, but, this is a rule which works both ways. Have the generally accepted medical statistics on the question of small-pox been "doctored?" Is it the question of blood-letting over again? We recommend Mr. Wallace's article to all physicians for careful perusal; it should be "read, marked, learned, and inwardly digested."

If our views concerning vaccination and small-pox are based upon insufficient and incorrect data, the sooner we find it out, the better it will be both for the public and ourselves. We cannot afford to disregard the warning of an eminent scientist like Mr. Wallace, even though he be not a member of the medical profession.

Scientific Review

The Present Status of the Widal Reaction.—Since the publication in this journal of the first scientific review on this subject (*Albany Medical Annals*, January, 1897), the question has been pretty thoroughly worked out, and certain modifications in the

original procedures have been made. It is the object of the present review to go over the obtainable literature bearing on the subject since 1897, and summarize the work done in that time.

It will be remembered that in Widal's original communication three possible methods of the application of the serum reaction were described: (1) the gross method, in which the suspected serum was added to a liquid culture of the typhoid bacillus, with a resulting precipitation appreciable to the naked eye in cases of typhoid; (2) the microscopic reaction with blood serum, and (3) the microscopic reaction by using dried blood instead of serum. In the two latter methods the blood serum, or the fluid obtained by adding water to the dried blood, was to be diluted ten times, and one part of this dilution was to be added to an equal quantity of a fresh liquid culture of the typhoid bacillus, the resulting reaction being microscopic, and consisting in the clumping and loss of motion of the typhoid bacilli. Since Widal's original work the naked eye reaction has been largely discarded, mainly on account of the fact that it takes a much longer time to show the characteristic change than specimens prepared by the microscopic method. A few observers, as Breuer, and Van de Velde, still use this form of reaction in a modified state. The majority of workers in this field now use the microscopic reaction either with serum or dried blood. Many of these, as Widal himself, Block, and others, seem to think that the serum method is to be preferred to the dry, but Wyatt Johnson and those who have used the dry method very extensively, claim that it is just as reliable, if proper precautions are observed. From a practical standpoint the serum reaction is only feasible in hospitals, or in situations where a laboratory is convenient, whilst the dry method is much simpler where the blood is sent from a distance or is collected by untrained individuals. The method of collecting the dried blood varies, Widal advising particles of sponge as the best substance for this purpose, Johnson and Mactaggart using non-absorbent card or paper, and Wesbrook and Wilson using small aluminum discs, which are rolled around the drop of blood after it has dried. When the serum itself has been used it has been collected in pipettes or capillary tubes, and either allowed to separate naturally, or has been separated by centrifugalization.

In Widal's original communication he recommended a dilution

of the serum of 1:10. Since this time most writers have claimed that this dilution is insufficient on account of the fact that sera from normal individuals, or those suffering from diseases other than typhoid, will sometimes cause agglutination in this dilution. It is to be noticed that in most instances where sera from diseases other than typhoid have been reported as having agglutinating power, they have been used either in dilutions of 1:10, or else in very low dilutions.

We find in the literature rare instances where serum in relatively high dilutions and coming from non-typhoid cases has caused agglutination. Thus Sklower found sera in three out of 100 non-typhoid cases which agglutinated typhoid bacilli in dilutions of 1:20 or over, de Rochement found agglutination in one non-typhoid case at 1:25, and in one reported case such a reaction has been found even at 1:40. The majority of observers seem to think that a dilution about 1:35 to 1:40 would be safe. Thus Carl Fraenkel recommends a dilution of 1:50, Grunbaum of 1:32, Kolle of 1:30, Block 1:40, Wesbrook and Wilson 1:50. Widal alone of the reliable observers retains the low dilution, though he claims to be able to distinguish the reaction due to the typhoid sera from the pseudo-reaction due to non-typhoid sera. Some writers use still higher dilutions, Bensaude, and Wesbrook and Wilson recommending dilutions of 1:50, though other observers state that in some unusual cases of typhoid agglutination may only take place with dilutions of 1:5. Coincident with the insistence on a sufficiently high dilution most observers have demanded a fixed time limit during which the reaction is to be observed. It is obvious that without a fairly constant degree of dilution and a fixed time limit, the work of different observers cannot be compared with any accuracy. It is found that as a rule the stronger dilutions of serum act more rapidly than the weaker ones, and as a result of this we find that certain observers recommend a relatively strong dilution and a short period of observation, whilst others recommend a weak dilution and a long period of observation; the most reliable workers seems to incline toward the latter proposition, largely on account of the already mentioned dangers of using strong dilutions. The time limit recommended varies from ten minutes (Arsamosskoff) to eighteen hours (some of Wilson and Wesbrook's cases). It seems probable that with dilutions of 1:40 to

1:50 a time limit of two hours is best, several observers having adopted this and proved it to be satisfactory.

Of equal importance with the dilution, and the time of exposure, is the character of the typhoid organism used in the test. All observers seem agreed that the best results are obtained with fresh cultures of the organism from eighteen to twenty-four hours old, the majority preferring bouillon cultures. A difference of opinion exists with regard to the original culture from which the fresh cultures are to be transplanted. Wyatt Johnson claims that a culture in an attenuated state grown at room temperature and only transplanted about once a month reacts most delicately to sera; other observers claim that the bacilli must be grown at thermostat temperature and transplanted frequently to give the most delicate reactions. The conclusions of Widal and Sicard, who tried various cultures of the bacillus typhosus procured from all parts of the world, showed but slight variation in the delicacy of reaction of any of them, and Fraenkel has arrived at similar conclusions from his observations. It has further been shown by Widal and others that the characteristic clumping is produced even in dead bacilli by typhoid sera; in fact, the reaction in cultures killed by formalin was almost as delicate as that with living bacilli.

It is important, from the clinician's point of view, to know about when the reaction first appears in the blood, and opinion on this point seems pretty uniform. In ordinary cases the reaction may be expected about the end of the first or the beginning of the second week. Widal and Sicard give the commonest time of appearance as the seventh day; Kose gives the end of the first week, Trumpp, who has studied the literature thoroughly, gives the end of the first week as the most common time; and Wilson and Wesbrook's report shows the largest number of positive results on the seventh day. On the other hand, the reaction may appear much earlier or much later. Wesbrook and Wilson report two cases reacting on the first day, Fraenkel reports a reaction on the second day, Zobolotny, and Achard and Bensaude have seen reaction on the third day, and as many as forty-three out of 513 positive reactions in Wilson and Wesbrook's cases occurred on the fourth day. Again, cases are to be met with in which the reaction does not occur until late in the disease; and in one case reported by Widal and Sicard the

reaction did not appear until the twenty-second day; Stern reports a case at the sixteenth day, Pick one at the thirty-fourth, and Kolle one at the sixteenth and one at the seventeenth. In cases reported by Breuer, Thoinot and Cavasse, and Eshner, the reaction only showed during a relapse, and was not present at all during the primary attack. In cases reported by Pelon, Berghinz, and Johnson and Mactaggart there was no reaction at all, though in Pelon's and Berghinz's cases there was positive proof that the disease was typhoid. The time of disappearance of the reaction seems to vary considerably in different cases; according to Knospel, the reaction, as a rule, soon disappears during convalescence; Weinberg claims to have found the reaction as late as thirty years after the attack, though he used low dilutions in nearly all of his cases; Widal and Sicard state that the reaction generally disappears within the first few months after defervescence; Eugene Fraenkel noticed loss of reaction in one case twenty-eight hours after defervescence, and C. Fraenkel observed it in three children only a few days after the beginning of defervescence. There is some chance of making a retrospective diagnosis in some cases which have a history of some obscure febrile disorder; Widal and Sicard found a marked reaction in three out of twenty-two old cases, one of these nine years after the original attack; all had been severe attacks with relapses. With regard to the question as to whether there is any relation between the intensity of the reaction and the intensity of the disease disagreement exists. Courmont has endeavored to graphically represent this relation by means of a graduated chart; he claims that a marked difference in reaction exists between the marked and benign forms, the reaction in the latter being less powerful, often late in appearance, and lasting but a short time. Levy and Gissler and other observers claim that there is no relation between the intensity of reaction and the course of the disease.

According to a table in the *American Year Book* correct results may be expected in serum diagnosis in about 96.5% of all cases examined, the reaction is positive in about 95.5% of typhoid cases examined, and is absent in 98.4% of non-typhoid.

With regard to the origin of the agglutinating substance it seems proved that it is present mainly in the solid portions of the blood, and in intimate relation with the albuminous constitu-

ents of these. In cases where a marked reaction is present the fluids of the blood also seem to contain some of the agglutinating substances. The question of the relation of the agglutinating substance to the process of immunity is still unsettled; Widal seems inclined to modify his original statement that the process is not connected with immunity, Pfeiffer and Prosekauer think the agglutinating substances are entirely distinct from the immunizing substances, and Metschnikoff and Bordet seem to have similar views, though crediting agglutinine with some action as a protective substance. These latter observers think that two substances are formed in infectious diseases; the alexine of Buchner, and a specific anti-body, agglutinine, which injures bacteria by agglutinating them.

A considerable amount of work has been done regarding the agglutinating action of other fluids than the blood; blister fluid, milk, pus, exudates from various cavities and urine have all been shown to have a greater or less agglutinating power, though in a less degree than the blood. Saliva, semen, and cerebro-spinal fluid have given negative results. Bile and tears have varied, sometimes giving positive, and sometimes negative results. The reaction has also been searched for in the serum of children born of mothers with typhoid fever; at times it has been present, at times absent. In a case reported by Wesbrook and Wilson the reaction was present in the child's blood fourteen days after birth, the mother having had symptoms of typhoid for two days before the child was born. In some cases the blood of the child has been negative, whilst that of the placenta was positive.

Finally, there must be mentioned certain cases in which a reaction has occurred with the colon bacillus or with the so-called para-typhoid bacilli. The colon reaction at times occurred in blood in which the typhoid reaction was also present, indicating a secondary infection with the former organism; at times the colon reaction alone was present, and this, according to Wyatt Johnson, was particularly apt to occur in cases resembling typhoid, but having a step-ladder temperature. One or two cases have been described in which bacilli resembling typhoid bacilli have been isolated from cases clinically resembling typhoid, but differing from it in some minor respects. The bacilli have been classed as para-typhoid bacilli, and cases of infection with them giving serum reactions have been reported by Widal and by Gwyn.

GEORGE BLUMER.

State Medicine

Edited by Harry Seymour Pearse, M. D.

Seventeenth Annual Report of the New York State Board of Health.—This report, for the year ending February 1, 1897, was transmitted to the Legislature, February 15th, of the same year, and is the last report issued by the Board.

After giving in detail, reports on numerous systems of sewerage and sewage disposal; investigations of nuisances, epidemics and water supplies; food and drugs and mortality tables, it concludes with an article on the "Suppression of Tuberculosis," in which it says, that "in accordance with the laws of 1893, it is the duty of the State Board of Health to investigate concerning the existence and cause of tuberculosis in cattle, and use all reasonable means for averting and suppressing such disease;" that it also authorizes the appointment of two members of the Health Board to have charge of the execution of all rules and regulations concerning tuberculous cattle, to keep a record of all work done, and to report to the Board each month. These two members constitute what is known as the Tuberculosis Committee, and correspond with the Cattle Commissioners of some states.

The work of this committee during the five years of its existence, has shown the vast extent of tuberculosis among cattle in this State; also, that the transmission of the disease to human beings through the medium of tuberculous meat and milk is preventable; that the people of the State do not appreciate the gravity of the situation; that it is a slow and difficult process to educate the cattle owner up to the point where he can realize that it is more profitable for him to have healthy than unhealthy herds.

The committee has been assisted in detecting tuberculosis by the tuberculin test, but by a rule of the Board has only been permitted to kill diseased animals in cases where owners have waived all rights to compensation under the law, which law provides compensation only by an appropriation of the Legislature. These appropriations have not been made some years however, and when made, have been wholly inadequate to pay the claims for cattle destroyed. So, the real purpose of the law has, to a large extent, been defeated.

The following paragraph, quoted from the article, sums up the

whole situation in a few words, and offers suggestions for the elimination of tuberculosis in this State:

"If the payment by the State for the tuberculous cattle destroyed be assured, as it can be by an act of the Legislature, appropriating a suitable amount for this purpose, a way will be open for the gradual extinction of bovine tuberculosis in the State of New York. If then, the tuberculin test be required for all cattle entering the State, the herds here, once freed, may be kept free from disease. This means a great and material benefit to dairymen and farmers, to cattle owners and citizens alike of the entire State. It means to all consumers of milk, the removal of a serious menace to health and life. It is believed that if the farmers, dairymen and dealers in, and the consumers of milk will take this matter under serious consideration and bring their influence strongly to bear, individually or in association, upon their representatives at Albany, such legislation may be speedily secured as will lead to most beneficent results for all."

Christian Scientists Win.—At a recent date, Miss Kate Lyon and Mrs. Atholie Mills, both of whom were accused of being responsible for the death of Harold Frederic, were discharged from custody.

The rapidity with which this accusation of manslaughter was quashed without a satisfactory explanation to the public by the authorities—in fact no explanation whatever has been offered as far as we can learn—has startled and disgusted the medical world. It seems to indicate that the power of the Christian Scientists is not limited to deluding people, but that by their peculiar methods they have fastened upon and obtained some control in the world of law and justice. This is certainly the basis of any explanation which may be forthcoming, whatever may be said to the contrary.

In reference to this case, Mrs. Mary Baker Eddy, founder of the Christian Scientists' Church, said:

"It now appears that Mr. Harold Frederic, of London, England, who is said to have died because of the Christian Science treatment, was first under the care of an M. D., but inasmuch as he was not recovering under that practice, but growing worse, he decided to try Christian Science. He did not, however, give

this system a fair trial, for his friends gave him no peace until they got him again under the drill of *materia medica*. Query — Whose failure was it? And should not the M. D., instead of the Christian Scientist be indicted for manslaughter?”

After what has occurred who can say that this lucid reasoning may not be the reasoning of the future. The international interest of the case has led to much discussion, and to one good result — the bringing out of a fact, heretofore doubted — that this “peculiar people” can be controlled by law. The *New York Law Journal* points to section 193 of the New York Penal Code (which provides that manslaughter in the second degree may consist of homicide, committed without design to effect death, “by any act, procurement or culpable negligence of any person”), and sees no objection, under this section, to the indictment and conviction of any one who, when called upon to attend a person that is obviously very sick, refrains from sending for a physician regularly licensed under the law of the State.

William A. Purrington (*Medical Record*, Nov. 26, '98) says, in quoting from a Supreme Court opinion: “Laws are made for the government of actions, and while they cannot interfere with mere religious beliefs and opinions, they may with practices.” He says further: “It may be a question of policy whether Christian Scientists should be prosecuted; whether cheap martyrdom might not strengthen them. But there seems no good reason, as matter of law, why they should not be punished for the evil they actually do, prohibited, if the policy seems wise, from treating the sick without adequate preparation by study of medical science, and convicted of manslaughter if death results from their interference.”

During the last session of the New York Legislature, Senator Coggeshall introduced a bill containing a provision which made the practice of Christian Science a misdemeanor. At the only hearing given the bill, the Senate chamber was crowded with women advocates of Christian Science, who pleaded long and loudly to have that provision struck out. This was finally done, though provisions affecting other sects were not touched. The bill did not come up for final passage.

It would not be a surprise to many to see a measure in the coming Legislature giving full legal sanction to the practices of faith-curists.

Medical Measures in the Legislature of 1899.—There is a promise of considerable activity in medical legislation in the session of the Legislature which opens this month. A long session is indicated, which will furnish abundant opportunity for a thorough discussion of each measure introduced.

A midwifery bill, general in application, has been promised by representatives of the State Medical Society. This is meant to take the place of the various local bills constantly coming up. Another dispensary bill will probably make its appearance early in the session; if so, the opposition met last year will probably be quite as strongly in evidence. Another osteopathy bill is looked for, and if it appears will bear watching. We would not be surprised to see a movement against vaccination inaugurated in the shape of a bill curtailing the powers of the health authorities. It has been threatened. We are glad to note that the Special Committee on Medical Expert Testimony, of the State Medical Society, will present a bill, which, even if it fails to pass, must indicate an advancement toward medical expert reform. Another "short-hour drug clerk bill" has been prepared and published, and will be presented early. It is quite possible that another attempt to place barber shops under sanitary control will be made. It is quite possible also that an attempt will be made to establish a State Colony for Consumptives. The scant courtesy shown this project last year was disgraceful, and should not be repeated.

Great interest in all legislative matters pertaining to medicine is looked for among the various societies, and the members of the profession at large.

Medical News

Edited by H. Judson Lipes, M. D.

THE ABRAHAM JACOBI HOSPITAL WARD FOR CHILDREN.—Dr. Jacobi has again been honored. A gift of \$50,000 for the endowment of a children's ward in Roosevelt Hospital, in order that clinical instruction in pediatrics may be given to the medical students, is announced and it has been named "The Abraham Jacobi Ward for Children."

HARVARD MEDICAL SCHOOL.—The late Edward Austin of Boston, left nearly \$1,000,000 for educational purposes; \$10,000 was given to the Bacteriological Laboratory of the Harvard Medical School.

THE O'DWYER SCHOLARSHIP.—The trustees of Columbia University have established in the College of Physicians and Surgeons the "O'Dwyer Scholarship," in recognition of the professional labors of Dr. Joseph O'Dwyer.

SIR WILLIAM JENNER'S DEATH.—Sir William Jenner, at the age of eighty-four years, died December twelfth. This distinguished English medical man began his medical career as a general practitioner. His first hospital appointment was as Surgeon Accoucheur to the Royal Maternity Hospital. In 1862 he was made Physician in Ordinary to the Queen, and to the Prince of Wales in 1863. From 1881 to 1889 he was President of the Royal College of Physicians of London, retiring from the practice of his profession in 1889. In 1894 the Maxom Medal of the Royal College of Physicians, which is given for distinguished services in clinical medicine, was conferred upon him.

MEMORIALS FOR DOCTOR GIBBS.—Rutgers' College at New Brunswick, New Jersey, recently celebrated its one hundred and thirty-second anniversary, at which function a tablet was unveiled to the memory of Doctor John Blair Gibbs of New York, who was the first American soldier to give up his life on Cuban soil. The tablet was presented by Professor Robert W. Prentiss, who, with Doctor Gibbs, graduated from Rutgers in the class of 1878. The government has also honored him, having recently named the General Hospital attached to Camp Hamilton, at Lexington, Ky., the John Blair Gibbs Hospital.

MEDICAL SCHOOL BURNED.—The building of the Medical Department of the University of Tennessee, at Nashville, was destroyed by fire November eleventh. More recently the Medical College of Indiana in Indianapolis, has been almost completely destroyed. Dr. Shohe, who slept in the building, was so badly burned that his death is momentarily expected.

DR. HERMAN BIGGS APPOINTED VISITING PHYSICIAN.—Dr. Biggs has been appointed visiting physician to St. Vincent's Hospital, New York, in place of Dr. Joseph O'Dwyer, deceased.

RESIGNATION OF DR. CARL BECK.—Dr. Carl Beck announces that he has resigned his professorship at the New York School of Clinical Medicine.

FACULTY APPOINTMENTS AT THE NEW YORK POLYCLINIC.—Dr. Charles H. Chetwood has been promoted from the position of adjunct professor to Professor of Genito Urinary Surgery. Dr. Chetwood has recently been appointed visiting surgeon to Bellevue Hospital. Dr. Frederick Whiting has been appointed Professor of Otolology, to fill the vacancy caused by the resignation of Professor Sheppard. Dr. Whiting is visiting surgeon to the New York Eye and Ear Infirmary.

RAILWAY SURGERY.—There will soon appear from the press of Wm. Wood & Co., a work on "Railway Surgery, a Handbook on the Management of Injuries," by Clinton B. Herrick, M. D., of Troy.

"ARCHIVES OF PEDIATRICS."—The fifteenth year of the existence of this journal closed with the December number. The publishers, E. B. Treat & Co., of New York, are now the sole proprietors of the journal, having purchased the interest of its founder and former owner, William Perry Watson, M. D., who had done much for the department of Pediatrics.

RUSH MEDICAL COLLEGE.—Dr. Sanger Brown has resigned his position as Professor of Medical Jurisprudence and Hygiene in the Rush Medical College faculty.

CRAIG COLONY PRIZE FOR ORIGINAL RESEARCH IN EPILEPSY.—The President of the Board of Managers of Craig Colony offers a prize of \$100 for the best contribution to the pathology and treatment of epilepsy, originality being the main condition. The prize is open to universal competition, but all manuscripts must be submitted in English. All papers will be passed upon by a committee to consist of three members of the New York Neurological Society, and the award will be made at the annual meeting of the Board of Managers of Craig Colony, October 10, 1899. Each essay must be accompanied by a sealed envelope containing the name and address of the author and bearing on the outside the motto or device which is inscribed upon the essay. The successful essay becomes the property of the Craig Colony, for publication in its Annual Medical Report. Manuscripts should be sent to Dr. Frederick Peterson, 4 West Fiftieth street, New York city, on or before September 1, 1899.

STATE REGENTS' MEDICAL EXAMINATIONS.—The reports for the school year, beginning August 1, 1897, and ending July 31, 1898, will show that there were 869 candidates examined, with a total of 217 rejections, or nearly twenty-five per cent. There were 809 candidates for the examination of the Medical Society of the State of New York of whom 607 were successful. There were thirty-six aspirants for the Homœopathic diploma, ten being rejected, while of the twenty-four Eclectics, five failed. It is interesting to note that the graduates of New York State colleges made a better showing than those of other States or foreign universities. The New York colleges were represented by 555 graduates, of whose papers 201, or about five per cent, were rejected. The candidates of the colleges of other States numbered 114, 143 of their papers being rejected (eighteen per cent); while the thirty foreign graduates had seventy-one papers rejected, or thirty-three per cent. During this period the Albany Medical College had fifty-six representatives, with a total of thirty-three papers rejected, or about eight per cent. The comparative standing of the several State colleges can not be given at this time.

WORK OF THE LUNACY COMMISSION.—There has recently been added a new wing to the Collins' State Hospital at Gowanda, N. Y., with accommodations for 120 women.

During this month there will be a new group of cottages for the care of the insane opened at Kings Park, Long Island, with accommodations for 1,000 patients. The commission is endeavoring to transfer all the

patients from the hospitals on Blackwell's and Hart's Islands to the newer buildings and when this is accomplished those old structures will be abandoned.

The contract for the Manhattan State Hospital, to be located at Central Islip, Long Island, has been let and soon this immense series of buildings will be under construction. This hospital, according to the plans of Mr. Perry, Superintendent of Public Construction, will consist of four divisions or groups, each composed of five or seven separate buildings, of two stories and all to be connected by wide, sunny corridors. The twenty-seven or more buildings are laid out on a semi-circle and for two of the groups there is provided a separate bath house, kitchen, employes' quarters, etc., within the circle, in the rear. Each building has its own day room dormitory and bath rooms.

When this hospital is completed, it will be a village by itself, and one may form some idea of its immensity from the fact that the total projected length will be 3,748 feet, and it has a capacity for 2,260 patients.

THE SANATORY CLUB OF BUFFALO.—At a meeting held December 14, 1898, the topic of the evening was "Hygienic Camps," and several interesting and instructive papers were read by experts in their respective lines. The subjects of "Sewers," "Water Supply," "Walks and Streets," "The Camp of Instruction," and other papers of similar import, were read.

ALBANY COUNTY MEDICAL SOCIETY.—The second intervening meeting, held on the evening of December 14, 1898, the President, Dr. Archambault, in the chair.

Dr. Blumer presented a paper on "Some Factors in the Pathology of Tuberculosis." Dr. Ball, Dr. Jenkins and Dr. Neuman discussed Dr. Blumer's paper.

A report of a case of "Leukaemia, Complicating Pulmonary Tuberculosis," was given by Dr. Wilder of the Adirondack Sanatorium, Saranac Lake. Dr. Van Rensselaer opened the discussion.

ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF GREATER NEW YORK.—The fourth annual meeting of this association was held at the residence of the President, Horace T. Hanks, M. D., No. 766 Madison avenue, New York city, Saturday, December seventeenth. The following officers were elected for the ensuing year: President, Dr. Reuben E. Burton (A. M. C., '55); Vice-President, Edward F. Quinlan ('68); Secretary, W. C. Spalding ('81); Assistant Secretary, Chas. Van Wert ('87); Treasurer, Henry F. C. Müller ('87); Governors, for two years, M. L. Rhein, M. D., D. D. S. ('80), and A. Parker Muir, M. D. ('96); for one year, S. C. Armstrong, M. D. ('85), Howard J. Wood, M. D. ('85); member *ex-officio*, Prof. Willis G. Tucker, M. D., Ph. D., the President of the A. M. C. Alumni Association.

It was decided to hold the fourth annual dinner Thursday, January nineteenth. Prominent speakers will be invited and no effort spared to make this function a greater success, if possible, than former ones.

STATE MEDICAL SOCIETY.—The meeting of the State Medical Society will take place as announced, January thirty-first and February first and second. The business committee, Willis G. Macdonald, M. D., chairman, has announced the following program. The session will open Tuesday morning at 9.15 A. M., with the President's Inaugural Address, followed by the Reports of Officers and Committees.

Dr. Chauncey P. Briggs, Ithaca, will read the opening paper on "Fracture of the Cervical Vertebrae, with Specimen." Dr. W. H. Park of New York, will follow with a paper on "Formaldehyde Disinfection." Drs. Wm. C. Krauss, New York; Clarence Rice, New York; Chas. N. Cox, Brooklyn, and others will follow.

Tuesday afternoon there will be papers by Drs. Willy Meyer, New York; R. H. M. Dawbarn, New York; B. Farquahar Curtis, New York; H. R. Hopkins, Buffalo; Henry W. Fairburn, Brooklyn, and others.

Tuesday evening the following men will participate: Drs. Geo. W. Brush, Brooklyn; John H. Pryor, Buffalo; Wm. Hailes, Jr., Albany; Louis A. Weigel, Rochester; G. W. Wende, Buffalo, and Wm. Maddren, Brooklyn.

The large number of contributions to the program by the members, has compelled the business committee to arrange for two sections on Wednesday—the general medical and the general surgical section, each with a distinct program. It is hoped that this plan will meet with general approval, and that more time can be afforded to the free discussion of papers.

At 5 P. M. the sections will hold a joint session. In the section on medicine, Drs. Butler, Brooklyn; R. W. Wilcox, New York; Chas. Mason, Peekskill; H. DeV. Pratt, Elmira; Landon Carter Gray, New York; J. H. Brownlow, Ogdensburgh, and E. D. Fisher, New York, will read in the morning. Drs. Simon Baruch, New York; H. L. Elsner, Syracuse; Wm. P. Northrup, New York; Grace P. Murray, New York; C. De La Montanye, Port Ewen; C. M. Rexford, Watertown; B. C. Loveland, Clifton Springs.

Before the section in general surgery will appear Drs. John O. Polak, Brooklyn; Ralph Waldo, New York; Herman J. Boldt, New York; John B. Harvie, Troy; J. W. Whitbeck, Rochester; H. T. Williams, Rochester; W. Gill Wylie, New York; Geo. M. Edebohls, New York; J. H. Glass, Utica; Robt. T. Morris, New York. Afternoon session: Reginald H. Sayre, New York; A. M. Phelps, New York; Wm. B. De Garmo, New York; E. W. Mulligan, Rochester; Herman Knapp, New York; D. B. St. John Roosa, New York; Daniel Lewis, New York; Roswell Park, Buffalo.

The joint session will be held to listen to the addresses of Drs. William Osler, Baltimore, and Abraham Jacobi, New York.

The Wednesday evening session will be held in the Senate Chamber at 7.30 o'clock, where the anniversary address by the President will be delivered, followed by the annual dinner.

Thursday morning there will be a business session with reports of committees. Drs. Wilding, Malone; Wm. E. Butler, Brooklyn; Geo. M.

McCombe, Frankfort; Louis F. Bishop, New York; Josiah Hasbrouck, Port Ewen, and others will give the closing papers.

PERSONAL.—Dr. W. F. Robinson, Assistant Surgeon Lewis Griffith, and Lieut. James Smith (M. D.), have returned with the First New York Volunteer Regiment.

Surgeon-Major Davis remains on duty at Honolulu.

Assistant Surgeon R. W. Andrews (A. M. C., '98), is now stationed at Santiago.

Dr. Willis G. Macdonald is at present formulating a "Report of the Surgical Work" done in the City Hospital for the past three years.

Married — Osterhout-Betts, at Watervliet, N. Y., November 17, 1898. Dr. John Jacob Osterhout (A. M. C., '98), and Miss Nellie Betts of Colonie. Dr. and Mrs. Osterhout will reside in Massachusetts.

Book Reviews

Laboratory Work in Physiological Chemistry. By FREDERIC G. NOVY, SC. D., M. D., Junior Professor of Hygiene and Physiological Chemistry, University of Michigan. George Wahr, publisher, Ann Arbor.

The present volume, the second edition of this book, is the result of evolutionary pedagogics, matured by the author's experience in the practical teaching of an experimental study, the immediate and ultimate results of which cannot too strongly be insisted upon. The contents of the book indicate the writer's course with his own classes upon the subject, a fact which argues the very practical character of this most excellent laboratory guide in physiologic chemistry. In the past students desiring the help of a work of this character, were of necessity compelled to seek the information desired in books written in a foreign language.

The work is divided into twelve chapters, which embrace a description of such experiments as illustrate the chemic constitution and physiologic nature of many substances to be met with in the human economy either under normal conditions or as a result of morbid influences. In chapters I, II and III, the subjects of fats, carbohydrates and proteids receive a very generous treatment from a more or less purely chemic standpoint. The succeeding five chapters are respectively devoted to saliva, gastric juice, pancreatic secretion, bile and blood—an excellent resumé of the experimental chemistry of these subjects. Following these are two chapters on the examination of milk and urine. Chapter XI is a satisfactory, although short account of some of the usual procedures of quantitative analysis. The remaining chapter of the book concludes with tables for the estimation of urine and a list of reagents necessary in carrying out the tests described in the text. It is evident that this guide is the outcome of careful preparation and much thought; and we are glad to see that for suggestions, the works of Salkowski, Hammarsten, V. Noorden and others have been freely drawn upon. As a laboratory

text-book for beginners and a guide to common practical methods of analysis in physiologic chemistry, it will be found helpful and handy.

AUGUST JEROME LARTIGAU.

A Text-Book upon the Pathogenic Bacteria. By JOSEPH MCFARLAND, M. D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Medico-Chirurgical Hospital and to the Rush Hospital for Consumption and Allied Diseases, etc. 497 pages. W. B. Saunders, publisher.

Significant of the reception by the medical profession at large of this text-book of the science of bacteriology is the fact that the present volume which is the second edition, appears in so short a time as two years after the first. The edition is practically a new book; it has been considerably revised and is chiefly characterized by the elimination of a number of eccentricities of interpretation met with in the previous volume. The additional 138 pages of the present copy over the old are made up largely of new chapters on whooping cough, mumps, yellow fever, hog cholera, swine plague, bacillus aerogenes capsulatus, and the proteus vulgaris, as well as some additions to the subject of antiseptics and germicides. Suppuration, from a purely bacteriologic point of view, is sufficiently well treated for the purposes of the student; the chapter on tuberculosis is a good description of the morphologic and cultural behavior of Koch's bacillus, but the meagerness of the text upon the fundamental results of recent experimental researches detracts to some extent from the description of the whole subject of tuberculosis. The article on diphtheria is one of the best in the book and clearly sums up in a concise form our present views of this very important disease. The excellence of the summary of the results of recent investigations upon typhoid fever reflects in a commendable degree the attitude of the writer toward this interesting and practical field. The *raison d'être* for the two pages on measles in a book of this character, and especially, in view of the skeptical attitude toward the etiologic relation of the microbic factors described, is not very apparent to the reviewer. Dr. McFarland's text-book deserves the flattering success of the previous edition and the purpose of the writer to bring the work up to date in all departments of the subject by introducing brief mention of all the recent work accomplished in bacteriology, has been so intelligently accomplished that its value is immeasurably enhanced as a manual upon this subject for students of medicine and physicians.

AUGUST JEROME LARTIGAU.

Manual of Diseases of the Skin with an Analysis of Twenty Thousand Consecutive Cases and Formulary. By L. DUNCAN BULKLEY, A. M., M. D., Physician to the New York Skin and Cancer Hospital; Dermatologist to the Randall's Island Hospital, etc. Fourth edition, revised and enlarged. G. P. Putnam's Sons, New York.

The name of the author is familiar as that of one of the best known in his specialty in this country, and as a somewhat voluminous writer.

The character of his contributions to medical literature is familiar to the profession. He writes lucidly, and gives the benefit of a large personal experience in presenting his topic. This manual was first produced a considerable number of years ago, and has now reached its fourth edition and while enlarged as well as revised, it is still of the familiar duodecimo size and contains about 360 pages. Its manifest aim is to present the subject of which it treats in a concise form. Not a few of these small hand books have been placed before us, their general plan being an alphabetic arrangement of the diseases; this one follows the customary plan of the more compendious works in arranging the diseases by classification together of those related, which, while not perhaps as ready for reference, doubtless give a less confused idea of the subject to those unfamiliar with it. The author has an admirable system of classification, to which, with little variation, he still adheres. Much may be said for the small Manual or Handbook, which presents a subject in compact form and with it, essential fact, but it must waste no space in inconsequential matter and must be direct in its expression. This is one of the smallest and while manifestly it can go but little into detail, for books three times its size have been written on one disease alone of the skin, it may well be said that no waste words are used and admirable use has been made of the limited compass of the volume. It bears the marks of the claim in the preface to having been thoroughly revised and one can find the latest word on many of the topics. So far as it goes, it is a competent guide to the student first attempting to master a subject which many find confusing and the practitioner may find it a convenient work of ready reference. No one should know better than one who has had Dr. Bulkley's large and ripe experience or who has had his extended personal contact with the general profession, how to present the subject from their point of view and what to select to say upon it in few words. A final chapter on therapeutics with formularies is very practical and attractive, as is also the diagnosis index with which the book ends.

F. C. C.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Treatment of Tuberculosis of the Bones and Joints.—Klemm has recently called attention to the principles of treatment of tubercular joint and bone affections (*St. Peters. Med. Woch.*, 1898, No. 39). It is well known that many cases improve without treatment or in spite of improper management, but the importance of care cannot be overestimated, for, especially among working people an ankylosis may be so promoted as to give the best possible service of the limb involved. He discusses only the affection in childhood, and summarizes as follows:

1. It is of the greatest importance to make an early diagnosis of joint tuberculosis.

2. The most important early treatment consists in absolute rest of the affected parts, to be secured by means of plaster of Paris bandages and rest in bed.

3. Upon recession of the symptoms the plaster of Paris dressing may be altered so as to permit of motion.

4. With progressive improvement a light supporting apparatus may be substituted.

5. Every manual reposition from abnormal position involves an uncontrollable danger for the patient.

6. It is inconsistent to be a partisan of either a conservative or an operative therapy; these do not depend upon the taste of the physician, but upon the condition of the patient, who needs for his affected limb in accordance with its condition, the most varied forms of treatment.

7. Iodoform injections afford a very helpful means, in case it is possible to bring the medicament in contact with the diseased tissues.

8. Tubercular suppuration requires the removal of the pus, either by aspiration or by incision, with ensuing iodoform treatment.

9. Operation is indicated when febrile movement or suppuration occurs, indicating progress of the tuberculous process or mixed infection.

10. Typical resections, with the exception of those of the hip-joint, are to be avoided; arthrotomy and arthrectomy, as well local extirpations, are to be done when possible.

11. The securing of firm ankylosis is to be preferred on principle to mobility of the joint.

12. The general treatment is the most important factor in the treatment of tuberculosis.

13. The ideal means of treatment of surgical tuberculosis consists in the establishment of sanatoria, which should be between vacation resorts and hospitals in their scheme of arrangement, should be in operation the whole year, and should be exclusively limited to the care of patients afflicted with tuberculosis.

Anæmia as a Local Anæsthetic.—Kofmann, in the *Centralblatt für Chirurgie* for October 8, 1898, writes an interesting article upon this subject. He claims that perfect anæmia of an extremity such as follows the application of a tight Esmarck bandage leads to almost perfect anaesthesia of the anaemic portion of the limb. He reports several cases of minor surgery — removal of ganglion of the wrist; removal of ganglion of the popliteal space; ingrowing nails, etc., in which he performed operations lasting as long as fifteen minutes in some instances, with practically no pain, merely by inducing anaemia of the part. He usually applied his Esmarck first, then went about thoroughly cleansing and shaving the part to be operated on and did not proceed with his operation until the part was perfectly bloodless. As requisite precautions for the method he states that, first, complete constriction, and secondly, a long wait, are necessary in order that absolute anaemia be present. The patients sometimes complained of discomfort at the point of application of the Esmarck bandage, but so far as the operation itself was concerned, many of them were unaware that it was going on.

Surgical Treatment of Acute Rheumatism.—J. O'Connor, in the *Glasgow Med. Journal*, Sept., 1898, reports two cases of acute rheumatism, treated by incision of the diseased joints and irrigation. In the first case, that of a man 40 years old, there had been a history of repeated attacks of painful and swollen joints during eleven years, and he had had gout in left great toe. Never had gonorrhoea or any other serious disease. Was admitted to the General Hospital at Buenos Ayres, with a temperature of 101.4° F.; furred tongue; urine scanty, high colored and albuminous. Intense pain and stiffness in left ankle, right knee and left elbow; considerable peri-articular inflammation about the ankle, and slightest attempt at movement caused intense pain. Twenty grains of salicylate of soda were administered every two hours, and the joints were enveloped in flannel and milk diet given. As no improvement followed, the left ankle joint was opened by a small incision parallel to the inner border of the external malleolus. Nothing but synovial fluid was found. Multiple incisions were then made through the inflamed and swollen peri-articular structures, cellular tissue freely opened up, capsule extensively exposed and presenting tendon sheaths incised. All wounds were irrigated and packed with perchloride gauze (the same treatment as is adopted in severe cellulitis). When the right knee joint was opened, six ounces of green turbid, almost purulent, serum were removed; turbid serum was also removed from the left elbow joint. Patient moved elbow normally on second day, ankle on third and knee on the sixth. Temperature fell to and remained at normal on the third morning. In three weeks from the time of operation was able to walk about, and was discharged from hospital cured during the fourth week.

In the second case, that of a workman aged 43, there was pain and swelling of both wrists, and in a few days both knees became involved; never had gonorrhoea, and past history was excellent. Salicylates and milk diet were tried for nearly two weeks without success, and then both wrist joints were opened, but nothing abnormal found. Inflamed surrounding structures were freely opened up by multiple incisions, and wounds irrigated and packed. Arthrotomy was performed on left knee and two ounces of the usual dirty serum removed. Temperature became normal in 48 hours. When dressed on the third day there was not a trace of pain or swelling about wrists or knee, and patient voluntarily moved the three joints through their normal range without any pain. In a week patient walked about, and in five weeks was discharged cured, as no trace of the disease had reappeared.

The author concludes with the statement that surgery is a curative agent in acute rheumatism, and that the sooner the latter term is dropped and acute infective arthritis substituted, the sooner will the complaint be not only better understood, but more successfully treated.

Asepsis in Laparotomies.—R. Schaeffer concludes an exhaustive article on this subject in the *Monatss. f. Geburtsh. und Gynæk.*, September, 1898, citing the results of investigations into the presence of germs in his operation room, and upon the persons of the operators, the whole con-

stituting the synopsis of an experimental inquiry. He summarizes as follows:

1. Asepsis differs from antiseptis not so much in the underlying principles of chemical disinfection, but more in the knowledge, first, that boiled water is the best germicide, and secondly, that the prevention of infection must be attained by restraining the germs from access to the wound and not by destroying them.

2. Sterilization of the instruments, the pads and the bandages, as well as the ligature silk is so completely attainable that improvement is not necessary.

3. The instruments for use are best spread out in a weak antiseptic solution, for which one to two per cent. carbolic water is most satisfactory. Knives, scissors and needles may be in alcohol.

4. The sterile pads do not lie exposed during the operation; the gauze jar is only to be opened by a nurse when the pad is to be used, and then to be immediately closed.

5. The boiled silk is to be preserved in a weak antiseptic solution. Every roll touched once with the hands is to be again boiled.

6. The storage jars for the suture material are to be covered with overlying glass tops, so as to protect the rim of the jar from dust.

7. In the same way the upper rims of the stock bottles for antiseptic fluids and alcohol are to be protected from dust. This is best done with a glass stopper.

8. As methods of sterilization of catgut, that are effectual from an antiseptic standpoint, the best are those adopted by Kocher, V. Bergmann, Reverdin, Krönig, Hofmeister, Schaeffer.

9. The usual method of disinfection of the hands (hot water and soap, alcohol, corrosive sublimate, vigorous brushing) is effective, if sufficiently long and carefully carried out. The use of operating gloves is not necessary.

10. The disinfection of the field of operation in laparotomies, is to be conducted as follows: One, and when possible, two full baths on the day of operation and the preceding day; shaving the pubes prior to the last bath, one per cent. formalin applications during the last twenty-four hours; energetic disinfection, not only of the abdomen of the patient, but also of the breast, the thighs, the loins and the vulva; covering the body of the patient with a freshly boiled sheet, provided with a slash in the direction of the linea alba.

11. If there be also contact infection, which is by far the most dangerous and most frequent source, then even greater care than heretofore must be exercised. Every collection of dust and unclean spot should be removed. For this purpose the walls and floor must be frequently washed. After every operation all blood stains and lint lying about should be immediately removed.

12. The formalin disinfection, by means of the Schering lamp, is entirely uncertain. Whether the formalin—in other ways—may be used to secure a germ-free operating room, appears very questionable,

because for the removal of the odor, opening of the window for several hours is required.

13. An active use of steam (for one and a half hours and longer) or a concentrated steam spray is followed for several hours by a marked reduction in the microbe contents of the room.

14. Simple in use and trustworthy is an artificial rain, which by means of a sprinkling apparatus in connection with the water pipes, throws the floating particles of dust to the floor.

15. While the expired air is free from germs, a certain danger threatens the wound on the part of the operator, in consequence of speaking, from small particles dropping from the head and beard and from the sweat.

16. For the prevention of this danger a linen cap is serviceable, and a double strip of gauze bound over the head and about the beard, cheeks and mouth. The custom of washing the face thoroughly before the operation diminishes the bacterial condition of the drops of sweat.

MEDICINE

Edited by Samuel B. Ward, M. D.

Blackwater Fever and Hæmoglobinuria.—Dr. R. U. Moffat, principal medical officer Uganda Protectorate, writes to the *British Medical Journal* (No. 1969, Sept. 24, 1898):

The recently expressed opinion of Professor Koch, that haemoglobinuria (blackwater fever) is only another name for quinine poisoning, is one calculated to do much harm.

It is difficult enough at all times to get patients to take quinine properly. Any one who has had much experience with malarial patients has heard such objections as these: "It (quinine) makes me deaf;" "Gives me a head;" "Upsets my stomach;" "Nasty taste," etc.

A new terror now awaits the unfortunate medical man when he tries to treat his patients with quinine. Koch's theory will be thrown in his teeth, and should his patient die after taking quinine and developing blackwater fever, the doctor will have to incur the odium of being the cause of the fatal termination. The pernicious results of Professor Koch's theory on the lay mind are already manifest. One man stationed in a very unhealthy part, and much troubled with fever, informed me that in future he intends to have nothing to do with quinine. His future history will be interesting, and it is comforting any way to think that his folly may perhaps be of service in the cause of science, since he is practically offering his constitution as an illustrative case. Two leading London papers have had articles on the subject, so that Professor Koch's theory is being spread widely. Professor Koch may be right in saying that quinine poisoning causes haemoglobinuria. After seven years in eastern equatorial Africa, during which time I have treated many hundreds of cases of malaria, I have never seen a man die of fever when quinine was given properly and early in the case. The fatal cases, whether complicated with haemoglobinuria or not, have all been those in

which for some reason quinine has not been administered or was given in very small doses, or else resorted to only when the case was practically hopeless.

Of blackwater fever I have seen but little, for our European population in Uganda has up to now been small, and as far as my experience goes the disease does not occur among natives. Out of nine cases of blackwater fever which I have actually treated myself two were fatal; in both the administration of quinine was neglected until too late. All the cases which recovered were treated with heroic doses (30 grains in 24 hours), and the attack lasted four days, the haemoglobinuria subsiding gradually. In the other cases, in which much larger doses were administered (60 to 120 grains in 24 hours), the haemoglobinuria only lasted from 24 to 36 hours, and stopped quite suddenly.

In ordinary cases of malignant tertian fever I have pushed quinine until I myself had begun to think that the limit of safety had been reached and that the patient was well-nigh poisoned with the drug, but never in such cases have I seen haemoglobinuria supervene. Speaking in the light of much experience, I can say that there is only one treatment for malaria — quinine, more quinine, and yet more quinine.

Treatment of Typhoid with the Serum of Convalescents from Typhoid.—Walger, in the *Centralblatt für innere Medicin*, No. 37, 1898, gives his experience in the serum treatment of four cases of typhoid. Three of his patients were enfeebled women, in poor surroundings, and the fourth, on account of the severity of the infection, did not give a favorable prognosis. In two cases, after the injection of 10 c. c. of the serum, the general condition was not only markedly improved, but the fever was quickly reduced, so that on the second and third day after the injection the morning temperature reached normal. In the third and fourth cases the general condition was much improved, especially the amount of nourishment taken. The writer calls attention to the fact that it is a characteristic of serumtherapy to improve the constitutional symptoms rapidly and the local processes more gradually. In all four cases, even after the injection, the diazo reaction was present. In two of the cases there were relapses.

Diphtheria. — Bambier and Ullman, in a short monograph published by Baillièrre et Fils, Paris, dwell upon the presence of the diphtheria bacilli in internal organs, not only in the lymph glands, but strikingly often in the medulla oblongata. This throws light upon the pathogenesis of diphtheritic paralysis and impresses upon us that the pharyngeal affection is only a part of the disease. In mixed infections the deleterious action depends upon the increased violence of one organism from the presence of another and the rapid diminution in resistance of diseased organs.

They differentiate the pure diphtherias from the severe mixed infections, the latter being characterized by the cyanotic and swollen face, excoriations of the lips and nostrils, marked swelling of the lymph glands and

hemorrhagic or ichorous condition of the mucuous membrane. The differentiation of diphtheria into its various forms is not only valuable on account of the prognosis, but important for the prophylaxis, as cases of simple diphtheria should not be placed together with cases of mixed infection.

Cholelithiasis. — At the Congress of German Naturalists and Physicians held at Düsseldorf, September 20, 1898, Naunyn presented a report upon cholelithiasis (*Wiener klin. Rundschau*, 1898, No. 41), summarizing as follows:

1. Tumors of the gall-bladder with biliary colic are most generally due to cholecystitis.

2. The pain of the so-called biliary colic is in many cases to be attributed to cholecystitis.

3. Icterus in biliary colic is also most frequently to be assigned to cholecystitis or to the frequently accompanying cholangitis; it is often an inflammatory icterus, in contradistinction to the "lithogenous" icterus, which may follow at a later stage if a stone lodges in the choledochus and impedes the discharge of bile.

4. There are cases in which an attack of cholecystitis assumes the form and course of biliary colic. After a few days the pains diminish, the gall-bladder tumor disappears, and the icterus and fever subside.

5. Cholecystitis may earlier or later entirely independently occur. The pains concentrate themselves upon the gall-bladder or are insignificant, while the indications of infection (fever, general discomfort, prostration), become most prominent. Such cases may terminate fatally after metastatic conditions, or they may pass on to a chronic cholecystitis, hydrops or empyema of the gall-bladder, or they may more fortunately terminate by the expulsion of a stone.

6. Cholecystitis and cholangitis induce numerous secondary affections of cholelithiasis, as abscess of the liver, ulceration of and perforation of the gall stone, either externally or into internal organs, and the ensuing occurrence of fistulae.

7. On account of the serous transudation accompanying an inflammatory catarrh of the mucous membrane of the gall-bladder, a stone lying in the neck of the bladder may be easily pushed into the cystic duct and so induce colic.

8. Cholangitis goes hand in hand with cholecystitis calculosa. If the cholecystitis is the cause of swelling of the gall-bladder, so the cholangitis is to be assumed as the cause of the painful enlargement of the liver. A cholangitis that attacks the minutest gall passages (cholangitis capillaris), has the peculiarity that it acts directly upon the liver cells, and quickly induces icterus.

9. Cholecystitis and cholangitis are from the beginning infectious. Even though normal bile is sterile, in that from fresh cases of cholecystitis calculosa is almost always found the bacterium coli. In old cases the bile may be found sterile, as the bacterium coli does not appear to be long-lived. This cholecystitis and cholangitis are seldom purulent,

except when some pus organism, as staphylococci and streptococci are present; it is consequently to be differentiated from empyema of the gall-bladder and purulent cholangitis.

10. Cure of the cholecystitis and cholangitis is to be expected when the bile appears again in the stools, as the calculus has been expelled. And when the stone is not expelled, and the attack is without result, the termination may be entirely favorable; for it may have happened that the symptoms have subsided, even though the cholecystitis continues, to remain latent for a time, and then recur.

11. There is no sure differential sign between the favorable and the unfavorable attacks of biliary colic: the symptoms are the same, and even the discharge of the calculus is not conclusive. If the calculus be found in the stools, there remains no assurance that others are not yet in the gall-bladder, and if the calculus be not found, the difficulty may be that it has escaped notice, as the search is a difficult one, and the stone may remain for several days in some pocket of the bowel.

12. Besides the cholecystitis and cholangitis, biliary calculi may prove dangerous through chronic icterus from obstruction.

13. In more than half the cases the cause of chronic obstruction-icterus is carcinoma, which is not always susceptible of diagnosis. In many cases nodules may be felt in the walls of the gall bladder, in others metastases in the liver, in the lymph glands or in the peritoneum; and an examination of Douglass' pouch should not be overlooked, in order to palpate thoroughly the rectum. But these metastases are not commonly to be found; then ascites may prove a valuable symptom, and marked ascites with cholelithiasis always indicates carcinoma. The cachexia in carcinoma is also to be considered.

Naunyn also reviewed the treatment. Does an operation guarantee recovery? A stone may escape the search of the operator and remain behind. Even if the stone be removed there is no surety that others will not form. It is a well-recognized fact that after complete operations attacks of biliary colic have occurred and calculi have been found in the stools. Before an operation is undertaken these possibilities must be fully explained to the patient, and complete immunity from attacks must not be promised. Acute and chronic cholecystitis may be operated upon from principle, for on the one hand, all such cases act as acute infectious disease, whose outcome is uncertain, and on the other hand, cholecystotomy is nowhere more easily carried out. Cases of the most acute cholecystitis and cholangitis with severe local symptoms, high fever, severe general infection, often accompanied by acute spleen tumor, may terminate fatally through peritonitis or from the general infection. Operation here should be immediately performed. That the chronic cholecystitis with hydrops of the gall-bladder is a surgical condition goes without saying. Chronic relapsing cholelithiasis gives a mixed clinical picture, in the course of which symptoms of agglutinated gall-stones, chronic cholecystitis and cholangitis, pericholecystitis and pericholangitis with adhesions, fistulae, and even carcinoma, may appear, offer an

opportunity for operative procedure, although not until after a thorough Carlsbad course has been attempted.

Chronic obstruction-icterus is not infrequently found among young people, usually due to a stone in the choledochus; frequently this is due to a carcinoma in the biliary ducts or of the head of the pancreas, or duodenum.

A drink-cure with Carlsbad water may be often successfully carried out at home, if it be followed by the use of cataplasmata. The reporter recommended that the patient for three or four weeks twice a day for three hours, that is, from 9:30 to 12:30 and from 3 to 6, remain recumbent and permit cataplasmata of linseed to be placed upon him. At the same time in the forenoon and afternoon three to four glasses of Carlsbad water are to be drunk. During such a cure the meals should be taken at 7:30, 1 and 7 o'clock, the principal meal to be taken at noon. An especially limited diet is not necessary, but fatty foods, raw fruit and salad, leguminous foods, cabbage, sauerkraut, champagne, beer and alcohol are to be avoided.

The Treatment of Gall-Stones.—The Berlin correspondent of *The Lancet* (Oct. 22, 1898), summarizes the conclusions of Kehr, published in the *Münch. Med. Wochenschrift*. Kehr considers that internal treatment is indicated in (1) cases of acute occlusion of the ductus choledochus without fever; (2) cholecystitis with or without icterus; (3) cases when calculi are discharged spontaneously during the attacks of colic—but when no calculi are discharged operation is indicated; and (4) cases combined with diabetes or gout or when other affections make the administration of an anaesthetic undesirable. A course of Carlsbad treatment is of great benefit after an operation has been performed. When the calculi are in the ductus choledochus, cholagogues, such as olive oil, glycerine, and salicylate of soda, may be used; when the calculi are still in the gall-bladder and an operation cannot be performed, attempts must be made to relieve the inflammation. The endeavors of the physician to make the calculi pass through the narrow duct into the duodenum are much more dangerous than the removal of the calculus by laparotomy. An operation is indicated in every instance (1) of acute sero-purulent cholecystitis; (2) in adhesion of the gall-bladder to the intestines, the stomach, etc., provided that pain has been felt; (3) in chronic occlusion of the ductus choledochus or cysticus; (4) in originally slight cholelithiasis, where the pains have continued notwithstanding internal treatment; (5) in purulent cholangitis; (6) in perforation of the biliary passages and peritonitis; and (7) in morphinism caused by cholelithiasis, where an operation must be performed previously to the treatment of the morphia habit. It is thus not easy to settle the indications for balneological or surgical treatment and a very exact diagnosis, including a reference to the patient's age, constitution, etc., is necessary before deciding whether the Carlsbad treatment or an operation will best suit the individual case.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Lactose as a Physiological Accelerator of Labor.—Keim, in the Transactions of the Parisian Biological Society for October 14, 1898, publishes some interesting statements regarding the oxytoxic action of lactose. He calls attention to the fact that the statement was long ago made by Horsley and others that lactose increased the muscular power. The writer accidentally stumbled across the discovery of the oxytoxic power of lactose in making some experiments to establish the influence of glycosuria in pregnancy. After making this accidental discovery he gave it to ten pregnant women, and as a result of this experiment gives the following conclusions:

First, that lactose always acted as an oxytoxic in women at term or nearly at term; second, that it was only efficacious after the onset of labor, i. e., after the partial exhaustion of the muscle sugar of the uterine muscle had taken place; third, that the minimum dose to be given is from twenty to twenty-five grams; fourth, that it acts most rapidly where labor is most advanced, and fifth, that it produces no unfavorable influences, either on the labor, the subsequent uterine retraction, or on the milk formation.

The Ætiology of Tympania Uteri.—Lindenthal (*Monatsschrift fuer Geburtshülfe u. Gynaekologie*, March, 1898), describes under the title *Tympania uteri* or *physometra* a condition whose chief characteristic is a quantity of gas in the cavity of the uterus sufficiently great to be demonstrable by percussion. Other symptoms, such as abnormal tension and inflation of the uterus, foul-smelling discharge with the accompaniment of gas bubbles coming from the genitals, often with perceptible noise—the so-called “flatus uteri”—have long been known as completing a clinical picture recognized by obstetricians.

Lindenthal discusses the symptoms at various stages of the condition and summarizes the literature of the subject, from which it appears that the condition has long been recognized, and before the days of bacteriology was supposed to be due to the introduction of air into the cavity of the uterus. Recently certain bacteriological studies of this subject have been made, and the question at present stands as follows:

According to the interpretation of their investigations, Wendeler and Gebhard believe that tympania uteri is due to the bacterium coli; while, according to Goebel and Dobbin, the bacillus aerogenes capsulatus (Welch, Nuttall), is the excitant of the condition.

The author examined four cases, and summarized the results of his investigation as follows: In four cases of tympania uteri one and the same bacterium could be demonstrated,—the one described by him as the exciting cause of emphysema vaginæ—an anaerobic bacillus in the culture. This bacillus is closely related to the organism found by Kroenig in the amniotic fluid of puerperal fever, as well as by Dobbin in a case of tympania uteri, and belongs, according to the writer's belief, to the group of oedema bacilli.

By inoculation of this bacillus in pure culture into amniotic fluid the formation of a gas was brought about and by bringing a pure culture of this bacterium into the cavity of the uterus of a pregnant guinea pig, a tympania uteri similar to that produced in the human being was brought about. It consequently appeared to the writer that this bacterium is capable of producing the condition described, and actually did produce it in the four cases which he had under his observation.

The other bacteria found in the cases have no aetiological relation to the tympania uteri—the staphylococcus albus and staphylococcus pyogenes, as is well known, have no such properties. The bacterium coli commune—as these researches show—has not ordinarily this capacity; for neither by inoculation of the amniotic fluid, nor by introduction into the cavity of the uterus of a pregnant guinea pig, could the development of gas be seen. The development of gas was only noted in relation to the bacterium coli commune when the amniotic fluid in a test tube or in the uterine cavity contained a pathological amount of sugar.

All theories consequently, which attribute to the bacterium coli commune the power of producing gas in the uterus, are at fault; and it appears to the writer that in most cases of tympania uteri it is not assuming too much to claim that the excitant of the condition is one or the other of the group of bacteria causing malignant oedema.

The possibility must be admitted that tympania uteri may be caused by any of the bacteria causing putrescence, but the proof of this has not yet been given.

H. J. L.

Symphiseotomy.—William P. Carr, M. D. (*American Journal of Obstetrics*, October, 1898), quotes from Lusk, who says of symphiseotomy that “its worst enemies are those who preach its simplicity and who ignore the risks involved in its employment. It is not in all cases easy of accomplishment. The avoidance of hemorrhage and lacerations calls for constant vigilance, and the after treatment involves an infinite amount of painstaking.”

From Carr's observation, and that of others, he thinks he may safely say that the most objectionable features of the operation are the difficulty and discomfort of keeping the bones in apposition by the methods in vogue, and the consequent danger of pinching the urethra or bladder, the danger of hemorrhage, and the danger of infection in a wound so close to the vulva and urinary meatus. He believes, however, that by careful attention to details all these objectionable features may be overcome.

The ordinary rules of asepsis and antisepsis must, of course, be rigidly observed, and in addition he has the following three suggestions to make:

1. The incision need not extend as low as it is usually made. The lower angle of the wound may be pulled down with a retractor, after the incision has been made down to the bone, and sufficient room thus gained to complete the operation safely without extending the skin wound nearer than two inches to the urinary meatus. This he believes to be an important detail, as it greatly lessens the chances of infection.

2. The bone should be carefully and thoroughly separated from the tissues behind and below, great care being taken to keep next to the periosteum. It is also important that this separation extend from three-fourths of an inch to one inch on each side of the median line, to insure the safety of blood vessels and urethra when the bones are separated. Several large anterior vesical veins and veins from the clitoris lie embedded in the fat and loose connective tissue between the anterior wall of the bladder and urethra and the posterior and inferior surface of the pubic arch; but these vessels are safe and the urethra is safe if freeing of the bone be done carefully. After the bones are freed all around, the joint may be divided with a Galbiati knife, or preferably with an ordinary scalpel, if precaution be taken of first passing a grooved guard behind the line of incision, as recommended by Farabœuf, Lusk, and others. The articular surfaces are not plane surfaces. Irregular rounded projections of bone, except in very young subjects, will frequently be found passing across the median line from one side or the other and fitting into corresponding concavities of the opposite bone, with only a thin layer of cartilage between. This makes the line of incision irregular, and the irregularities can be better followed with a thin, sharp-pointed knife. If a thick knife be used, these bony projections must be cut through forcibly.

3. He would recommend wiring the bones. He could conceive of no possible valid objection to uniting them firmly with stout silver wire, and believed that this will very materially shorten the time necessary for firm union, that it insures firm union and that it will add immensely to the comfort of the patient subsequent to operation. He is aware that necrosis and suppuration have been attributed to the use of silver wire in this manner, but he freely confesses that he does not believe such troubles can be justly attributed to the wire or the wiring. They could have been due to nothing but infection, and should this occur it would be an easy matter to remove the wire. Farabœuf, Pinaud, and Caruso recommend silk sutures through the tough ligamentous tissue anterior to the pubes. Such silk sutures, according to Carr, are worse than useless. When the strain of separation comes upon them they will tear through the tough tissues like hot wire through butter; and silk ligatures are vastly more irritating and vastly more apt to become infected than silver wire.

The paper is concluded with the remark that "The safest of all material to bury is silver, and the safest material to bury it in is bone."

H. J. L.

ALBANY MEDICAL ANNALS

Original Communications

For the ANNALS.

ADDISON'S DISEASE IN CHILDREN, WITH THE REPORT OF A CASE.

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(Concluded from the January ANNALS, page 20.)

SYMPTOMS.

The first symptoms are of a general nature. They consist of mental lassitude, loss of energy, frequent headache, vertigo, faintness, and at times tinnitus aurium. Patients suffer from insomnia or great drowsiness. The general nutrition suffers, although the fatty layer remains well developed. There is anorexia, often vomiting, apparently causeless, often paroxysmal, although these digestive disturbances differ and are not always constant at this period of the disease. Cardialgia occurs, but is frequently in no relation to the amount of stomach contents, and then again it is more prominent after meals. There is flatulence, especially of the stomach and eructation with more or less vomiting. In many cases, there is diarrhoea, though for the most part only toward the end of the disease. The condition early in the disease is constipation, interrupted by occasional attacks of looseness. Remissions, and even ameliorations may occur, but after

each one, the patient is a trifle worse, until finally the increasing feeling of general weakness causes him to consult his physician. At this time, the objective symptoms are usually slight in comparison to the subjective in uncomplicated cases. There is a muscular weakness, as is shown by the disproportionately great fatigue after slight exertion, the weak hand pressure, and even slight tremor of that member. As the case progresses, however, other and more definite symptoms arise. The pulse becomes quicker and is weak, soft and extremely small. The apex beat becomes so reduced in impulse that it is often impossible to palpate it, especially when the patient is supine. The facies is pale, even cyanosis of the skin may occur. The respirations are moderately accelerated, the temperature in most cases is sub-normal. Very rarely is there an evening exacerbation; when it does occur, it is very slight. Complaint is made of pain in the back, the loins, the epigastrium and both hypochondria. In the later stages this is felt with more severity in the left hypochondrium, where there is also great tenderness on pressure. Pain is also felt in the joints, and is increased on motion, but there is no swelling or change in the form, and no great tenderness on pressure. A certain amount of stiffness is also common. The dyspeptic symptoms now increase rapidly, constipation and diarrhœa alternate at shorter intervals than previously, but there is nothing characteristic about them. The urine contains nothing abnormal, although albumen has been reported in a few cases. Indican, at one time regarded as almost pathognomonic, is of no great value, as it is found in other diseases in which the metabolism is defective. In the meanwhile, there develops that very remarkable, and almost constant symptom, pigmentation of the skin. It begins gradually and makes its first appearance on the surfaces exposed to the light and air, the face and back of the hands. Then follow the surfaces that are normally the seat of pigment, viz., areolæ of nipples, genitals, the penis and scrotum having a peculiar sooty hue. The mucous membrane of the vagina is frequently deeply pigmented; the axillary folds, and finally those portions exposed to the pressure or friction of the clothing, hips and shoulders, and abrasions; the scleræ, corneæ, nails, palms of the hands, and soles of the feet, scalp and hair remaining unaffected. In a number of cases, some deposit occurs on the buccal mucous membrane, on the tongue, and rarely on the lips. The pigment is

deposited here in patches of irregular size, varying in color from bluish grey to black. The skin remains soft, smooth and usually glistening. For several months this condition may remain, then there is more or less rapid loss of strength, muscular weakness increases in intensity, as do also the gastric symptoms. There is almost absolute anorexia, distressing singultus, and great flatulence come to contribute to the general misery. To this is added exhausting diarrhœa, later, often uncontrollable nausea and vomiting. The vomitus consists of dark bile-stained watery material. The gastro-intestinal disturbances, particularly frequent in children, sometimes appear as paroxysms of vomiting and diarrhœa, with or without fever. Dyspnœa becomes very distressing. In addition, grave nervous symptoms now appear, loss of consciousness, loss of memory, vertigo, symptoms that are very much increased in the erect position; muscular twitchings confined to some of the smaller muscular groups, and epileptiform attacks make their appearance. These latter may occur also during the early part of the disease, and are then very much increased in intensity and frequency as the disease approaches its end. In other cases, these attacks may become general, and present the picture of a convulsion, and one case is related by Broadbent, in which the attacks resembled chorea. The intensity of the pigmentation usually keeps pace with the increase in the intensity of the symptoms, being at first a light smoky grey, then greyish yellow, greyish brown, and finally a deep bronze or copper color. Death finally occurs amid symptoms of increasing general asthenia. At times it is gradual; at others sudden — cases in which the amount of prostration does not appear excessive. In a certain number of cases, however, the fatal termination is ushered in by such severe nervous symptoms as coma, delirium and epileptiform attacks. These latter may develop quite rapidly and unexpectedly.

IRREGULARITIES.

These symptoms are subject in a fair number of cases to irregularities that make the diagnosis more or less difficult.

While the course is usually chronic, and may extend over several years, a few cases run an acute course. They may begin with a violent initial fever, accompanied by vomiting and diarrhœa, terminating fatally in a few months. In some cases though, the acute stage may subside and be succeeded by a second chronic

one. Cases of the former type may be mistaken for typhoid, as the tongue and lips are frequently covered with sordes.

Some cases, while not acute, run their course in six to twelve months.

The order of the appearance of the constitutional symptoms and pigmentation is not regular.

Melasma may precede the constitutional symptoms by eight to sixteen months and vice versa, although it is rare for the latter to exist more than a year before pigmentation occurs. Melasma is entirely absent at times, the fatal ending occurring so rapidly as to anticipate it.

The pigmentation may occur in patches, and in rare cases in streaks. The scleræ sometimes show little deposits of deep pigmentation. The hair occasionally grows darker, so much so that in a few months a blond may become a brunette. At times there is associated with it leucoderma. There may be rises of temperature irrespective of infection of other organs. The usual nervous disorders may be replaced by delirium and maniacal delusions of sight and hearing.

The heart beat may be slow. One case is on record of seven beats to the minute (Risel).

Anorexia was replaced in at least one case by bulimia (Kussmaul).

There is at times a very offensive odor from the body. Hutchinson reports two cases that exhaled an odor similar to that of the negro; Ohmann-Dumesnil one of bromidrosis with hyperidrosis.

In children pain is not a very marked symptom, and in the majority of cases absent. On the other hand convulsions, either local or general, are much more frequent than in adults.

DIFFERENTIAL DIAGNOSIS.

A well marked primary case of Addison's disease, presents very little difficulty in diagnosis. It must, however, be remembered that Addison's disease is not the only disease in which the condition of the body presents discoloration of the skin. It must also be borne in mind that a fair percentage of cases runs its course without bronzing. It then becomes necessary to diagnosticate Addison's disease by the exclusion of such wasting diseases as abdominal cancer, tubercle or lymphoma, tuberculosis of the peritoneum, pernicious anæmia and others. The condition of sun

bronzing easily separates itself when it is remembered that the parts affected are the face, neck and arms, that is, the parts exposed. The discoloration is uniform and is not situated as in Addison's disease. There is, moreover, more frequently robust health than the reverse. The condition known as Vagabond's disease, is accompanied also by pigmentation, which is, however, more marked on the trunk than on the face and hands. Close inspection shows the presence of nail marks, which are due to the person afflicted scratching himself, because of the intense itching. Between the discolored patches, healthy skin may be found. The epidermis is roughened in contradistinction to that of Addison's disease, which is always smooth. The patient is usually very filthy. The pigment of vagrant's disease is not restricted as it is in Addison's disease to the rete Malpighii. Under the use of alkaline baths and soap, the pigmentation of vagabond's disease may be diminished. The melasma gravidarum, and that accompanying chronic uterine disease, as well as that accompanying exhausting lactation, is most sharply defined on the face, especially the forehead. It is also found on the linea alba and nipples. In addition, the symptoms and circumstances differ greatly from those of Addison's disease. Amyloid kidney is not uncommonly accompanied by discoloration of a dingy cast, but as this disease is frequently secondary to chronic extensive suppuration, the diagnosis should not present any great difficulties. Pulmonary tuberculosis, is at times accompanied by melanoderma, which is confined to the face, never attacks the mucous membranes, and does not increase. Aside from this, there are the chest symptoms and other constitutional symptoms that accompany the disease as a rule, such as morning chill, evening temperature, night sweats, etc., and recourse to bacteriologic examination of sputum. pityriasis versicolor need only be mentioned to be easily differentiated, as it attacks with its discoloration only parts of the body protected by clothing (chest). The discoloration of this disease occurs in rather small patches which become diffuse and are separated more or less by healthy intervening skin.

The pigmentation of yellow fever and malarial fevers is not so great as that in Addison's disease, neither is it marked on the sites preferred by the pigmentation of Addison's disease. In addition, there is the enlarged spleen and the history. There is a form of bronzing that is hereditary. In this condition, the his-

tory and the lack of constitutional symptoms will decide the question. The latter diagnostic point must, however, be considered with great caution, as cases of Addison's disease may be ushered in by a long period of simple bronzing without any other constitutional signs. The post-eruptive bronzing of Syphilis does not occur on the characteristic sites of Addison's disease, besides being accompanied by symptoms totally unlike those of Addison's disease. Chronic icterus presents a discoloration that is rather of a greenish yellow shade than brown. The conjunctiva is pigmented, and the urine also contains pigment. The pulse is slow; in Addison's disease, it is rapid.

Arsenic long continued will produce a pigmentation very much like that of Addison's disease. It is therefore apt to occur in psoriasis, chorea and Hodgkin's disease. On discontinuance of the drug, the pigmentation again passes off. Usually there is no pigmentation of the mucous membrane. In carcinomatosis a pigmentation occurs that is rather gray and does not affect the sites characteristic of Addison's disease. Argyria is often quite deceptive, in that the mucous membranes are affected. The differentiation is made by the history of some malady for which silver is frequently used, and by examining a section of the skin and the urine, in which silver will be found. In the diabete bronze of the French, occurs a pigmentation greatly like that of Addison's disease, which has been variously explained as being due to diabetic cirrhosis of the liver, or due to disease of the pancreas, interfering with the sphanchnics, and through it with the suprarenals. Pellagra in the chronic pigmentary form is deceptively like Addison's disease, both clinically and locally. There will, here, however, be a history of ergotized maize being used as food. The disease is epidemic in Northern Italy, and does not occur in this country. The bowels are much loosened in Addison's disease, the reverse is the case in pellagra. In widespread melanosarcoma with visceral metastases, the pigmentation very much resembles Addison's disease. It is differentiated by the glandular involvement and the black reaction of the urine with chloride of iron (Neusser). Cases of Basedow's disease have been reported with pigmentation. It is only necessary to name the disease in order to put the clinician on his guard. In Hodgkin's disease (Pseudoleukæmia), pigmentation also occurs. The glandular enlargement of this disease should settle the diagnosis. In

addition, it is well to remember there are such markedly dark complexions that it is possible, for a short time, to be led by them into an error. Furthermore, when there is any suspicion of facial mixtures, this point should be completely cleared up.

It is necessary to mention only such conditions as chronic hepatic disease, constipation in sedentary patients with their patchy staining of the facies, scleroderma, with its thick epidermis and sometimes general pigmentation, melanotic sarcoma, which sometimes is accompanied by a very diffuse pigmentation, but also by the rapid wasting of that disease in order to differentiate them from Addison's disease.

PROGNOSIS.

The prognosis of the disease has until a very recent time been absolutely fatal. Cases reported as cured have been viewed with suspicion, and rightly so, as being erroneously diagnosticated. Still it must be admitted that theoretically some cases due to tuberculosis might have recovered, as some cases of pulmonary tuberculosis recover. It has become necessary now under the sway of orrhoterapy to modify this prognosis considerably, as will be seen in the following remarks on treatment.

TREATMENT.

The past treatment for the most part has been palliative. The constitutional treatment, such as it was, consisted of administrations of tonics and hæmatic stimulants, among which stands first arsenic. Cod liver oil, extensively tried at one time when the opinion that Addison's disease was always due to tuberculosis was held, is generally not tolerated by the irritable stomach of the disease. For this irritability, liquor calcis, carbonated water with a little brandy, bismuth, creosote, opium in small doses, dilute hydrocyanic acid (with caution), may all be used. Massage and faradization of abdomen to derive blood from abdominal vessels at one time were also lauded.

For the constipation it is wiser to use enemata. Cathartics are to be avoided absolutely, as the profound depression following their exhibition may be fatal.

The diet should be simple, and consist of nourishing soups, milk, eggs, meat jellies, koumyss, matzoon and peptonized foods. Thanks to organotherapy, thought has also been directed to the possibility of remedying this disease by the use of an appropriate organic medicament.

It has been found that the administration of adrenals produces effects that may be summed up as consisting of increase of vaso-motor power, slowing of heart beat and increase of blood pressure. The experiments that were made in this direction were made for the purpose of demonstrating whether or not the adrenals could be employed in the same manner as thyroid or thymus gland.

It is about three years that, as a result of these experiments, adrenal gland has been used in Addison's disease. The best form for administration is the dry extract compressed into tablets. The dose should begin with $2\frac{1}{2}$ gr. and be slowly increased to 12 or 15 gr. per diem (Oliver). While it is too early to speak of cases as cured and to look upon this treatment as specific, some notable results have been obtained. The strength of the patient increases, muscular tone is restored, and in a few cases the patient has apparently been cured.

Francis reports a case that improved, but, nevertheless, ended fatally;³⁵ Jones³⁶ and Oliver,³⁷ Tonoli,³⁸ report each a case of successful ending; Bramwell³⁹ and Sansom⁴⁰ a case each of temporary amelioration; Phear,⁴¹ one that was entirely unsuccessful.

Logically, the proper treatment is surgical treatment.

In the majority of cases, there is present a disease (tuberculosis, neoplasms) that may sooner or later invade the general economy and cause death in this way, even if the patient successfully combats his Addison's disease for a time. The few cases in which no disease of the adrenals was found cannot be considered.

Unfortunately, the asthenia will always seriously interfere, unless the adrenal extract will be found on further extensive trial to relieve this condition and allow the patient to undergo successfully the depression of anesthesia and surgical shock.

Accidentally, this gland has been removed.

A tuberculous adrenal, which appeared as a tumor, lying directly on the spinal column, was removed. The patient who was suffering from Addison's disease recovered, and at end of eight months no evidence of the disease remained.⁴²

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For the ANNALS.

THE ORGANIZATION AND MANAGEMENT OF A MILITARY HOSPITAL, AS SEEN AT FORT McPHERSON, GEORGIA.

By EDGAR A. VANDER VEER, M. D.,

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Late Acting Assistant Surgeon, U. S. A., Ft. McPherson, Ga.

Soon after war with Spain was declared I was appointed an Acting Assistant Surgeon, U. S. A., and ordered to report to Major Blair D. Taylor, M. D., U. S. A., for duty in the general hospital, which was about to be established at Fort McPherson, Georgia.

I arrived at the fort on the 10th of May, 1898; found that Major Taylor had just received the orders for establishment of the hospital, and that, as yet, nothing had been done towards that end, so I had an opportunity of observing the hospital grow from nothing to one of a thousand beds, all in the space of three months.

Fort McPherson is situated six miles from Atlanta, Ga., with which it is connected by steam and electric cars. It has an altitude of 1,500 feet above sea level, and the soil all around is very sandy. It is very centrally located, being 600 miles from Tampa and Fernandina, and about 150 miles from Chickamauga, so that soldiers could be transported here without very much difficulty. The water supply is obtained from artesian wells, 2,000 feet deep, the water collected in a large tank from which it is distributed over the whole reservation by means of underground pipes. There is also an admirable system of underground sewerage.

In times of peace Fort McPherson is the station of the Fifth Infantry, in which command are about 600 men. For these 600 men there are three doctors, a major surgeon and two assistant surgeons, and as there are never more than ten men sick at once, they have plenty of time to devote to scientific research. Besides the three doctors there is a hospital steward, who, in this case, was a graduate physician, two acting hospital stewards and eight Hospital Corps men.

The barracks are situated on one side of the parade ground, and the officers' quarters on the opposite side, facing them. There are four barracks buildings, each building capable of holding about 125 men. The buildings are two stories in height; the

upper story containing the dormitories; each dormitory contained eighteen beds very nicely, and made ideal wards. Back of the barracks buildings was the Post Hospital, which had accommodations for twenty beds. In this building all the executive work of the general hospital was carried on, and the wards used for any sick officers that we might have.

On the fifteenth of May an order was issued by the Secretary of War, designating Fort McPherson as the station where all the recruits for the regular army should be sent; and after being armed, equipped, and drilled, should be sent on to join their commands. Immediately the recruits began to pour in in squads of from fifty to 200, until at last there were about 4,000 recruits at the fort. As soon as the recruits, or rookies, as they were called, were armed and equipped they were sent off, and others came in to take their places, so that all summer long the number of recruits at Fort McPherson never fell below 3,000 men. These recruits interfered in many ways in the running of the hospital. At first they occupied the barracks, but as the demands of the hospital grew they were put out of there, and sheds were built for them. These sheds, or Pullman sleepers, as they were called, were about ten feet high and fifteen feet wide. They had three rows of bunks, one above the other, and the men were packed in like sardines, in the most unhealthful way possible.

Sick call, at which two of the surgeons had to attend, was held at 6.15 A. M., and had to be finished by 7 A. M. In that space of time between 150 and 200 men would be treated, but it was a case of hustle. There was no trouble about waking up in time, for the sunrise gun was fired at about five o'clock; the doctors reported at the office in the general hospital, and then, after that, went through their own general wards. Each surgeon had two wards under his charge, and was in supreme charge of them. The only restriction was that he had to make three rounds a day, the first one being commenced before 10 A. M., and the other two at such times as were convenient to him. Once a week each surgeon was detailed as Officer of the Day, and was on duty at the office at the general hospital from 9 A. M. to 9 P. M. Then any time between the hours of 11 P. M., and 4 A. M., he had to make the rounds of the entire hospital and see that everything was running right; if not, to straighten matters out

and report the fact to the executive officer the following morning.

Every Saturday morning Major Taylor made an inspection of the whole hospital, and if he found anything wrong the person whose fault it was was very severely reprimanded.

All the recruits were compelled to be vaccinated before leaving for the front. The method of vaccination was as follows: Every morning about ten o'clock a squad of about 200 men would be lined up in front of the vaccinating room. Twenty at a time would be taken, told to roll up the sleeve of the left arm, and if they could show a good scar of under seven years' standing, were excused, otherwise, they were sent into the wash-room, their left arm washed and dried; then they formed in line again, the doctor made an abrasion of the skin and passed the man on to the next doctor, who applied the virus. This virus was warranted to take on the side of a brick house, and it fully carried out the guarantee. A careful record was kept of all the men, both those who were vaccinated and those who were not, in case any trouble might arise.

Another duty of the surgeons was the examination of recruits. Each applicant for enlistment had to be thoroughly examined and was thrown out for the slightest defect. The rule at first was that all recruits, if examined first by civilian physicians, had to be re-examined by an army surgeon, but this order was soon changed, much to our relief. Another duty was the sanitary policing of the camp. Each morning a doctor made the rounds of the camp and noted its sanitary condition. At the close of this inspection he reported the camp's condition to the commanding officer, who was supposed to see that the sanitary inspector's recommendations were carried out at once, but this the commanding officer very often failed to do.

A word concerning the hospital train: It consisted of ten coaches of tourist sleepers with two baggage cars and a Pullman sleeper. The train was in charge of a surgeon, with an assistant surgeon and a full complement of Hospital Corps men. Each patient had a whole section to himself and was made as comfortable as could be under the circumstances. Our first train load of sick came about the middle of May and consisted of sixty cases, most of which were venereal. On the 1st of June the first real cases of typhoid fever were sent up from Tampa.

The train brought up about seventy-five patients, twenty of whom had typhoid. After that the train would come about once a week and bring anywhere from 100 to 150 patients, and each time the number of typhoid fever cases would increase, till finally all the patients, in proportion to the number of men, were typhoid fever patients. All of the train loads came from Tampa or Fernandina, except one, which came from Chickamauga. The virulence of the typhoid would vary with each train load, those coming from Chickamauga being of the most virulent type. The officers who had charge of putting the men on the train did not seem to show any discretion about it. For no matter whether a man was in the first or third week of the fever, on the train he went, and was sent 600 miles up to Fort McPherson. The consequence was that in the next forty-eight hours after the arrival of a train we would have anywhere from five to a dozen deaths of men who were exhausted by the trip and ought not to have been moved in the first place.

Before the arrival of the train Major Taylor would find out how many patients were coming and then he would make ready that number of beds, beginning in the hospital building nearest the railroad track. A certain number of Hospital Corps men would then be detailed to the transportation of the men from the train to the hospital. As soon as the patient was in bed his name, age and regiment were taken. If he had any money or valuables these were also taken and a receipt given him for same. As soon as possible the patient was given a bath, and as no data were generally sent with the patient telling us what week the fever was in, or anything about his condition, he was given an enema, on general principles.

The treatment consisted in giving the patient as little medicine as possible. Whenever the temperature went above $102.2-5^{\circ}$ a sponge bath was given. The cold plunge was not given because of inadequate assistance and also for the reason that the patients seemed to react better from the sponge bath than they did from the tub, and their temperature was lowered just as much and remained down for as long a time. In cases of persistently high temperature ice bags were applied to the head and neck, and cold water coils to the abdomen. In cases of heart failure 1-30 grain of strychnine was given every two or three hours or an ounce of whiskey at the same hours. In extreme

cases the whiskey and strychnine were both given alternately every two hours. Digitalis was given on rare occasions. In cases of delirium with a good deal of subsultus tendinum, one or two doses of a 1-100 grain of hyoscyamine seemed to have a wonderfully quieting effect. For persistent diarrhœa five minims of the tincture of opium were given first, and if necessary the dose repeated. If that failed the usual procedure was to give ten minims of the aromatic sulphuric acid every two hours and half a dram of bismuth subnitrate every three, and this generally had a quieting effect. If a man had five or six movements in the twenty-four hours no measures were taken to check them; above that number the above-mentioned remedies were given. If a patient's bowels did not move for thirty-six hours he was given an enema of soapsuds and water, the idea being to keep his bowels fairly open. For hemorrhage the usual means were adopted, such as elevating the foot of the bed, ice bags to the abdomen, etc. For tympanites, an enema, consisting of a teaspoonful of turpentine stirred up with an egg and this in turn mixed with a pint of warm water, seemed to have a wonderful effect in reducing the distension. In cases of perforation not much could be done, the patient being so exhausted.

As regards diet, the patients were allowed all the milk they wanted to drink, which averaged about three pints a day. If they did not like milk they were given soups and broths, but these were generally so poor that they were glad to go back to the milk. After the patients' temperature had remained normal, both night and morning, for seven or eight days, they were given a little oatmeal, and if that agreed with them their diet was gradually increased up to the regular army rations. Two or three cases were lost because some kindly disposed ladies brought food into the wards and gave to the men, causing relapses and in these cases perforation. But "the doctors were so horrid, the men were so hungry and they never gave them anything to eat." The stools were thoroughly disinfected with chloride of lime. Bi-chloride was not used, because it could not be obtained in sufficient quantities. The sheets and pillow-cases were collected night and morning and taken to a central station, where they were thoroughly disinfected, and then sent to a laundry in town to be washed. On account of the scarcity of thermometers the temperatures were only taken three times a day.

The mattress on a bed on which a man died was burned. Autopsies were held on as many of those who died as possible. At first there was a scarcity of trained female nurses, but the number was gradually increased until we had two nurses to each ward, one for day, the other for night duty. There were also on duty three orderlies to each ward in the daytime, and one at night. As soon as the men were convalescent enough to look after themselves they were put out in tents, where they improved very rapidly. Altogether in the three months from June 1st to September 1st there were about 800 cases of typhoid treated, with fifty deaths, which, all things considered, is a remarkable record.

The Woodbridge treatment was not tried, because the combined experience of the medical staff seemed to be against it, and the doctors were too much afraid of censure to risk any experiments.

We had one train load of wounded of 235 men from Santiago, but inside of a week one-half of this number were able to go home on furloughs. It is a sad fact to relate, however, that of the other half remaining in the hospital for any length of time fully three-fourths of them developed typhoid fever, showing there was something wrong somewhere. Also, at one time, there was six per cent of the Hospital Corps sick from the same cause.

Since returning home I have learned with much sorrow of the death of Dr. Donald Taylor, the son of Major Blair D. Taylor, commander of the hospital. He was an only son and a young man of much promise.

THE HEALTH OF THE TROOPS AT CAMP McKINLEY.*

By WALTER F. ROBINSON, M. D.,
Lecturer on Electro-Therapeutics, Albany Medical College.

I wish to present to you to-night a few facts which were learned from actual observation in Camp McKinley, along with some conclusions which seem to follow from them. But let me first say that this is not a scientific paper. While the facts in the matter are of undoubted scientific interest, no one has had time or opportunity as yet to consider them in a scientific spirit. It

* Read before the Albany County Medical Society, January 11, 1899.

may be years before the government will find time to attend to it. A proper person will then be appointed, the voluminous data will be placed in his hands and as a result we shall have a true scientific history of this war.

During the month of July, 1898, the First Regiment, New York Volunteers, was in camp at Presidio, San Francisco. From there it was moved by detachments, according to the capacity of the transports, to Honolulu, Hawaiian Islands. The last detachment did not leave until late in August and arrived in Honolulu on the 3d of September. It was marched directly to Camp McKinley, where it found all the rest of the regiment, so that on this date the camp was complete. A word as to the location of this camp. It was on the steep slopes of an old extinct volcano, whose jagged summits towered above the tents to the south. To the west the land sloped gently away to the sea, distant about an eighth of a mile, and which afforded the men fine opportunities for a daily bath: a most desirable thing in the tropics.

The elevated position of the camp was an important point in its favor, as all the lowlands in the island are apt to be swampy and malarious. There was no water of any kind about the camp, either in the shape of streams, ponds or surface wells, so that the important matter of water pollution, which figured so largely in some of the southern camps, may be left out of the question. The wind always blew from the south-east, and it seemed to come right from the mountains, so fresh and invigorating was it. It commenced to blow every afternoon about four o'clock and made the rest of the day delightfully cool and pleasant, and sometimes continued to blow all night. I believe these three factors, the dry and elevated position, the nearness to the sea and the bracing mountain wind, were of immense importance, and it was largely due to them that the men kept as well as they did.

A word as to the food supplied to the soldiers. During the first week or two it was certainly unsuitable; not bad or deficient in quantity, but too concentrated, consisting almost entirely of hard-tack or bread and meat. On complaint being made to the commissary, he exerted himself to remedy this evil and the men were soon supplied with potatoes, onions, rice, prunes and such articles as the climate demanded.

The camp obtained its water supply from the city water-works. It was brought to the camp in iron pipes, which ran right angles to the rows of tents, with a faucet opposite each company street. It was impossible for the water in these pipes to become contaminated from the sinks in camp. As an extra precaution the water for drinking purposes was thoroughly boiled in large cans made for the purpose.

The diseases affecting the soldiers may be divided into two classes. First, those resulting from the climate and from indiscretions on the part of the men themselves; and, second, those which were not so caused. In the first class may be mentioned diarrhœa, colds and malaria. The two former were extremely common, so much so as to be almost universal. I do not believe there was a man in camp who at some period of his stay did not have one or both of these complaints. Cases of true dysentery were extremely rare and the diarrhœa, as a rule, was not serious. They generally lasted about a week or less, and as a rule would yield readily to remedies. The too concentrated diet of the early days in camp was undoubtedly the cause of some of these cases. Others were due to directly opposite causes, namely, over-indulgence in fruit or eating unripe fruit. It should be said that in a certain number of the cases of diarrhœa it was simply a symptom of the early stage of typhoid fever, and such cases do not belong in this class. Colds were not quite as common as diarrhœa, but they were still very frequent, and, unlike the former, did not yield readily to remedies. A soldier having a cold would cough and cough until in disgust he would cease to pay attention to it and it would gradually wear away. Another disease belonging to this first class was fever, including under this term all forms which presented themselves, except such as were diagnosed as typhoid. These were so peculiar that they will deserve a short description.

They were nothing like the malarial fevers which we read of in text-books and occasionally meet with in this part of the country. The recurrence of the fever at a certain day and hour, the regular succession of anything like "chill," "fever" and "sweat," as occurs in typical malaria, all were absent. Chills were either entirely absent; or if present they were not well marked. Sweating was often profuse, but it would be more or less continuous, and in many cases seemed to last almost all the

time. The fever had the type which has been described in other camps as "obscurely remittent." In other words, it had no type at all.

In the early days of Camp McKinley the fevers seemed to be characterized by peculiar mildness of type and depression of spirits. The fever would only run a few days, and the soldier would soon feel as well as ever. These little attacks received the name of "Boo Hoo Fever," and as such they were known throughout the camp. After the first two weeks these mild attacks gave place to more severe ones.

In the second division of my classification there is one disease alone whose frequency and importance dominates all others. I refer to the terrible typhoid fever which devastated the camp during the month of October and led to its abandonment and the recall of the regiment. In the absence of exact data, it seems hardly worth while to attempt any intelligent discussion of this epidemic. When the enormous amount of business incident to "closing up" the Spanish war has been completed and the government can find breathing time, it is highly probable that a suitable person will be appointed to go over the enormous amount of data involved and give us a true account of this matter. In the writer's opinion, the germs of typhoid found their way into Camp McKinley almost as soon as it was established, and were being slowly and surely disseminated among the troops during the whole period of its occupation. While the epidemic was extremely wide-spread, it was fortunately of a very mild type, and the number of serious cases was comparatively few. As to the cause of the disease, the writer is very strongly of the opinion that flies played an extremely important part. In the old-fashioned system of sinks used at Camp McKinley there is of necessity more or less exposure of fæcal matter. Flies are not slow to take advantage of this, and as the food in camp is also more or less exposed, it is easy to see how infection can be carried from the sinks to the kitchen. The government at Washington quickly realized the fact that the old style of sinks was not suitable for permanent camps, and a committee of experts was at work during the summer elaborating a better system. A new and improved style of sink had been decided upon and a full description of it had been sent on from Washington to headquarters at Honolulu. Unfortunately, the dread disease had

already gained considerable headway, and the question of moving the camp was beginning to be discussed.

The question may be asked, why did not the medical department foresee all this and provide these improved sinks at first? The answer is ready at hand. This government was plunged suddenly into war, without the slightest warning or preparation, and as a result an enormous increase of work was immediately put upon all the departments. Each had all it could do to accomplish its routine work, without taking time to experiment with new methods. This is the first time in our history that large bodies of men have been camped for any length of time in dry tropical climates, and all sorts of new conditions have arisen. Furthermore, it must be remembered that at least two weeks are required for letters to go from Honolulu to Washington, and that the mails only went about once in ten days. Last, but not least, the medical department had to rely almost exclusively upon medical men without special knowledge of camp hygiene, in whose choice they had no voice. Under all these circumstances it is hardly to be wondered at that the epidemic should have occurred as it did. Had it been possible to have kept typhoid fever out of Camp McKinley, the health record of the regiment would have been little short of phenomenal.

The three classes of diseases, intestinal, bronchial and malarial, while almost universal in their extent, showed themselves unable to undermine the health of the First Regiment. In the writer's opinion there are less than a dozen cases where any serious and permanent injury to the health has resulted from all these diseases put together, omitting, of course, the typhoid fever. There seemed to be a remarkable power in the men to throw off the malarial poison, and severe cases, with high temperature, would often yield in a single day to appropriate anti-pyretic treatment.

Taking into consideration the condition of the men when they returned to their homes, and all the various vicissitudes of climate and disease which they have gone through, it is evident that the First New York Volunteers must be an exceptionally strong and sturdy lot of men.

In conclusion, the writer would like to say a word about bringing the troops home at this season, in view of the fact that the government has been criticized for so doing. In his position as surgeon to the four companies stationed here he has had the

best opportunity to judge of the health of the men, and the measure was certainly a wise one. There have been, it is true, a few cases of fever among the soldiers since their return, but it was already in their systems and would have certainly come out sooner or later, no matter where they were. It was certainly better that these poor fellows should be sick in their own homes, surrounded by the loving care of parents and relatives, rather than in some distant camp and in the hands of strangers.

Clinical and Pathological Notes

Systemic Infection Complicating Injury to the Knee; Liability of Accident Insurance Company.—The following case, on account of the unusual train of symptoms and because of the difficulty at first of determining their etiology, and the financial liability of an accident insurance company, seems worthy of permanent record:

M. McC., baggage handler, aet. 47, on Tuesday, September 6, 1898, met with an accident while handling baggage, by which his right patella was injured. This resulted in inflammation and abscess, with temperature running up as high as 103.3°. On September 9th, the abscess was opened, syringed out and dressed in the usual way. It finally healed up about October 25th, and there is nothing left now except a well-formed scar, with some inflammatory induration. The abscess appears to have occurred in the pre-patellar bursa.

About two weeks after the injury a series of patches of vesicles appeared on both legs, on the hands and on other parts of the body, accompanied by a good deal of pain and itching, œdema of both legs and both hands, with elevation of temperature up to 103°, and which was diagnosed by the attending physician to be herpes zoster. After this, pain appeared at intervals in the knees, elbows, shoulder, chest, head and feet.

The first week in October erysipelas appeared in the scalp and extended day by day over the forehead, eyelid, ear and cheek, and was followed by swollen and inflamed throat with ashy patches. All these symptoms disappeared rather suddenly about October twentieth.

On October 24th, he complained of a peculiar and severe headache behind his ears. This was immediately followed by thickness of speech and loss of power in the left arm and hand. At that time his tongue on being protruded was deflected. The left lower extremity was apparently unaffected. The symptoms of paralysis have gradually disappeared since the first day; but intense pain in the head, shoulders, chest, and particularly in the left arm, have required daily hypodermics of morphine ever since. The attending physician examined the patient's urine within a week after the injury, and found that it had a specific gravity of 1.025, was acid, contained no albumin when tested by heat and nitric acid, but Heller's test gave a distinct white band. This condition continued to be found at four subsequent examinations, about a week apart. The heat and nitric acid test began to show albumin about October 10th, and the specimen examined November 6th contained a large amount of albumin by every test that was made, and was loaded with hyaline and granular casts, large and small, and also contained blood casts. On physical examination made November 11th, marked weakness of the left side, face, arm and leg was found. No deflection, however, of the tongue on protrusion, no difference in size of pupils, which reacted rather slowly to light. Sensation perfect on both sides. The patellar reflexes on both sides were exaggerated, but no ankle-clonus present. The chest was normal, except that the area of cardiac dullness was increased, and there was a marked accentuation of the aortic second sound. Abdomen negative. Pulse was regular, full and not accelerated. Arterial walls seemed somewhat thickened, but apparently without any patches of atheroma.

The examination of the patient himself, the history, both oral and written, submitted by the family physician, and confirmed, as far as it came within his knowledge by the company's surgeon, are so corroborative that there is no doubt about this statement of fact—in other words, that there is no possibility that this is a case of malingering.

Of course, abscess of the pre-patellar bursa is not a very uncommon occurrence, but it is uncommon to have such a train of symptoms follow after it. The claimant had the appearance of having possessed an excellent constitution, and of having enjoyed perfect health. He said, also, that he had not lost a day

from his work in twenty-three years, and this statement was supported by that of acquaintances.

There are three suppositions to be made about the case:

First, that the man, without his knowledge, was the subject of chronic Bright's disease at the time the accident happened, and that his present condition was an acute outbreak, brought about by the unusual confinement to the house and bed by the accident which he met with.

The second supposition was that the train of symptoms which followed the accident was a pure coincidence.

The third supposition was that he was perfectly healthy, and that this unusual train of symptoms was directly due to the accident through bacterial infection, the result of re-absorption from the abscess.

If the latter supposition was true, a bacteriological examination of the urine ought to show the presence of pus organisms, and a specimen, carefully taken in a sterilized flask, and sent to the Bender Hygienic Laboratory for examination, showed by tests, including cultures on various media, the presence of streptococcus pyogenes. In this connection it is to be borne in mind that there were no rational or physical signs of cystitis, pyelitis or any other inflammation in the urinary tract, and that no pus corpuscles appeared under the microscope.

Considering, therefore, that he had been a perfectly well man for over twenty years at the time of the accident, and that these organisms are found in abundance in the urine, the conclusion is that this somewhat unusual train of symptoms is, in fact, the direct result of systemic infection following the accident.

SAMUEL B. WARD,
ANDREW MACFARLANE.

November 15, 1898.

Correspondence

HEIDELBERG LETTER.

HEIDELBERG, GERMANY, *January 2, 1899.*

It is fortunate in Germany at least, that Christmas comes but once a year, for they make it a very festive occasion and refrain from all appearance of work, the result being, that the University

has been tightly closed for over two weeks, and one is not allowed to work even in the laboratories.

They even permit the patients in the University Krankenhaus to rest unmolested at this season.

A holiday book which is having a wide sale throughout Germany was written by Professor Adolf Kussmaul, who formerly held the chair of General Medicine in Strassburg University. The book is entitled "Early Recollections (Jungerinnerungen) of an Old Physician," and gives a very interesting and accurate idea of the life and work of a medical student fifty years ago. Professor Kussmaul is now living in Heidelberg, and is the father-in-law of Professor Czerny.

Professor Vierordt, whose book on Physical Diagnosis has met with so much favor abroad, is a believer in hydrotherapeutics for the pneumonia of children. He has shown a number of cases of pneumonia, and one of infantile double pneumonia, which recovered under that treatment. When the temperature is high he recommends cold douches, 72° F., and baths of 92°. He also gives stimulants when indicated. In neuralgia, especially of the facial nerve, he recommends large doses of quinine sulphate, i. e., six grains t. i. d.

One seldom sees a binaural stethoscope in Germany. They are considered very unsatisfactory and unreliable, so the Germans adhere to the primitive wooden variety, with a large flat ear piece. They become very skillful, however, in using them and interpreting the results.

In the auscultation of the heart, Professor Erb lays very great stress upon what he terms the "fifth point" of auscultation. This is situated near the left border of the sternum, about the junction of the fourth rib, and is midway between the points of auscultation of the mitral and aortic valves. He claims important murmurs are heard here which cannot be detected at the classical points, and hence, are often overlooked by physicians. The heart is uncovered by lung at this point, and nearer to the chest wall, and moreover, the valves are anatomically closer than elsewhere, so that any change in the blood current, too weak to be transmitted, can be heard only at the "fifth point."

During the demonstration of a case of diabetes, Professor Erb pointed out the fact that if the cold Fehling's solution became darker on the addition of urine, it was a strong presumptive indication of the presence of sugar.

Professor Czerny was the recipient of another honor this Christmas. Together with Professor Trunecek, of Prague, he was awarded the prize of the Paris Académie de Medecine for the year 1898. The prize was awarded for a method of treating carcinoma of the face. Cases which were not too far advanced had been cured by the application of arsenic.

A rather remarkable sequence of an "indiscretion" was shown a short time ago in the Syphilitic Clinic. A man forty-five years of age, married, and having a family, went to a neighboring city on market day, a few weeks before, and after imbibing too much alcohol, spent the night in a house of ill-fame. When presented he had gonorrhoea with quite a little discharge, several soft chancres and also one chancre which had all the appearance of a hard chancre. Dr. Bettman neglected to state if pediculi pubi were obtained at the same time. A very sad sequel to this chapter of accidents (?) is that his wife, who is pregnant has been infected. It will be interesting to know what effect this will have on the foetus.

H. L. K. SHAW.

Editorial

Tuberculous Cattle Foisted upon New York. At a meeting of the Health Board of the city of Albany held January 13, 1899, the statement was made that "after the cattle were inspected at West Albany, the diseased ones were dumped on the Albany market, and that much sickness resulted in consequence." It was also said: "It is an outrage to unload such cattle here." These statements were considered as "startling" by the lay press, but the State health authorities have long been aware of the existence of the evil, yet were unable to effect a remedy because of the inactivity of the Legislature.

The ANNALS, in its department on State Medicine, has repeatedly called attention to the weak points in the control of the disposition of tuberculous cattle in New York State. In the April number of 1897, in an article entitled "The Appointment of a State Veterinarian," can be found the paragraph: "Our

State holds no restriction whatever against the constant inflow of tuberculous cattle to its territory. States surrounding us guard every gate, where cattle enter their precincts, with an inspector, who tests each head for tuberculosis. And we are told that many heads of cattle that are judged tubercular by them are thrown back into this State. * * * The State should have all cattle entering its borders examined for tuberculosis at the points of entrance."

The New England States have inspectors at all points of entry from New York State. Massachusetts has one stationed at West Albany. There is at present no law preventing the unloading of rejected cattle into our State. However, there is now a bill in preparation providing for the inspection of cattle at all our points of entry.

Early in January, in the city of Albany, thirteen cattle reacted to the tuberculin test and were condemned by the State Board. Eight were slaughtered and all found to be tubercular. Last year this board had \$10,000 to defray the expenses of its tuberculosis committee in the examination of cattle. This year it will ask for \$50,000 to carry on the investigation and to reimburse owners whose cattle are condemned and killed by order of the board.

With sufficient funds to carry on the investigation of cattle within the State, and a law preventing the entrance of any but healthy cattle, some progress may be expected in the control of tuberculosis. We are glad to note that the Legislature has acted promptly in support of this earnest and vital work of the State Health Board by the introduction of a bill covering this subject.

Feigned
Insanity.

Two interesting cases of feigned insanity have been recently published in the daily press, which show that it is possible for a man to feign insanity so successfully as to deceive physicians. The first case shows the objects for which men feign insanity.

"After conducting a public sale on the Pocono Mountain on Saturday, Auctioneer Reeder Posten manifested symptoms of mental trouble. When friends undertook to care for him his conduct became that of a person violently insane. He was placed on a train and taken to his home, and since then has become the rational being that he was prior to the alarming manifestation of Saturday. Posten says he was feigning insanity to win

a bet that he could ride home without paying car fare. The conductor did not collect his fare, and Posten won."

The second case, that of Diffenderffer, was described as follows in a press despatch of December 12, 1898:

"Lancaster, Pa., Dec. 12.—Albert Diffenderffer was to-day sentenced to the Eastern Penitentiary for twenty-three years. The charges against him were robbing two houses and shooting Constable Moore and two deputies who caught him in the act. He shot the officers in trying to escape from them.

"Diffenderffer is the young man who has the power to throw himself into a cataleptic state. He did so after his arrest for this offence and remained in it for nearly five months. He fooled the prison officials and leading physicians of the county, and secured an order of the court transferring him from the county prison to the hospital.

"He was in the hospital but a week when he escaped, but was recaptured a week later at his grandfather's home. At the time of the commission of these offences Diffenderffer was an escaped prisoner from the Huntingdon Reformatory, getting away with others after attacking the keeper. The Huntingdon authorities wanted him for jail-breaking and assault, but the court decided that Lancaster county would first dispose of him.

"He will be taken to the Eastern Penitentiary to-morrow. The sentence meets with the approval of citizens, as Diffenderffer was a young desperado."

The point of interest is that Diffenderffer had the ability to put himself into a cataleptoid state, and to remain in such a state for a period of five months. He succeeded in having himself transferred from the county jail to a hospital, whence he escaped in a few days. As showing the ability of criminals to feign insanity for a long period, it might be added that Barr, a prison convict at Auburn, feigned, but not successfully, a condition of profound dementia for a period of five consecutive months. The first case shows the frivolous objects that men seek to accomplish by feigning insanity. Another person, being embarrassed about getting his insane wife to a hospital, feigned a condition of profound dementia, thus leading her to accept the advice to take the husband to the hospital, where he produced the papers for her detention. Newspaper correspondents have feigned insanity in order that they might enter a hospital, and there are some other instances of feigning which are very interesting, but which need not be related now.

Scientific Review

The Principle of Cure. —Prof. Behring, in a lecture delivered at the University of Marburg early this year, gave a scientific explanation of the principle of cure.

After the marvelous progress due to the work of Lister the hope was expressed that some antiseptic would be found which would accomplish for medicine what had already been done for surgery, or what quinine does for malaria. But experiments quickly proved that living animal cells were much more sensitive to antiseptic agents than were the bacteria, and that the animal injected was killed before the bacteria were destroyed, or their growth even restrained. The attempt was then made, instead of destroying the pathogenic bacteria, to render harmless the poisons they produced. In diphtheria and tetanus such agents are employed as the bacilli grow unrestrained in the anti-toxin, and yet by it their poisons are rendered harmless.

Koch's tuberculin, Pasteur's treatment for hydrophobia and Jenner's vaccination are classed under a different principle of cure — isopathy — and in close association is the organic therapy, the use of the internal secretions.

This principle of isopathy was defined by Hippocrates in the sentence, "The same thing which induces a disease also cures it." To explain vaccination and the inoculation in anthrax the theory prevailed that the bacteria of a weakened infection absorbed the material in the body necessary for the bacteria. Immunized animals, however, show no loss of food material.

Recent experiments, however, throw light upon this subject. After recovery from poisoning by bacteria there appear in the blood antitoxins, and in some diseases, as cholera and typhus, substances are found in the organism which has become immune which restrain and destroy these bacilli. This discovery of the anti-toxic and anti-bacterial agents renders simple the explanation of self-healing in infectious diseases and of the production of immunity with infectious material. It was also learned that by increasing quantities of the infectious agent, an increase of the antitoxin was produced in the blood. The method of this action was, however, unknown. Ehrlich has, however, recently advanced a theory which throws some light upon this subject.

1. Tubercular poison is disease producing in persons who pos-

sess in their cells a substance chemically uniting with the tubercular poison.

2. When the poison-combining substance passes from the cells into the blood it becomes a protecting and curative antitoxin.

The substance in the living cells which is necessary for poisoning, is the curative principle when found in the blood.

The characteristics of the tetanus poison substantiate the first part of this hypothesis. Tetanus produces visible changes in certain ganglionic cells controlling muscular action. If the hypothesis of Ehrlich is correct, then the poison of tetanus should be found in the cells of the central nervous system combined and neutralized. Ransom administered fatal doses of tetanus poison to pigeons and found post-mortem everywhere considerable quantities of the poison, except in the central nervous system.

In the spinal cords of healthy animals he found a substance which combined with the tetanus poison and produced the protective qualities of the antitoxin.

The determination of protective and curative elements in organs which would combine with poisons will doubtless lead to the employment of organic antitoxins in those diseases for which animal antitoxins cannot be obtained. Two examples will indicate the possibilities of this anti-toxic and anti-bacterial organotherapy. Wernicke administered the spleen of guinea-pigs with anthrax, after the destruction of the bacilli they contained, to healthy guinea-pigs, and produced an antitoxin which rendered harmless in mice an infection with anthrax. The spinal cord of a pigeon finely triturated and injected into a mouse, renders it immune to a deadly dose of the tetanus poison.

Ehrlich seeks to explain also the method by which a toxin makes the blood antitoxic. The cell, in neutralizing the poison, develops a loss of substance which the organism endeavors to make good by the regeneration of similar substance following the general biological law that more antitoxic substance is produced than is destroyed by the union with the poison. The surplus passes from the cells into the blood. This regenerative process is stimulated by increased quantities of toxins until the blood reaches the curative condition employed in serum-therapy. Immunity cannot be produced by toxins without modifying the living cells, inducing increased cellular activity, and more or less

marked morbid symptoms. Immunity by a toxin is direct, by an antitoxin is indirect.

The self-curative action of disease due to bacteria, as pneumonia, is thus easily explainable. The pneumococci especially affect the lungs, and with their toxins induce increased activity in the parts with the production of antitoxin. This enters the blood and renders harmless the toxin and induces, after victory over the toxin, the crisis. In some cases the crisis and recovery do not follow because the cells are so overwhelmed by the poison that they are unable to produce sufficient antitoxin.

In tuberculosis the poisoning is so insidious that the conditions for cure are unfavorable, as the increase of this poison-combining substance is so gradual that no great quantity of it enters the blood. But increased irritation, due to more toxin would produce more antitoxin, and thus it would pass into the blood.

This method is always dangerous in practice, since without poisoning to a certain degree, the cells cannot produce antitoxin. The danger is intensified when the irritative condition, as revealed by increased temperature, is markedly increased. Koch, therefore, states that patients with fever are excluded from treatment with tuberculin. For these cases the hope is that there may be produced a sufficiently strong tubercular antitoxin, which will cause to pass into the blood these toxin-combining substances, without inducing irritation of the tissues.

State Medicine

Edited by Harry Seymour Pearse, M. D.

Leprosy in Hawaii.—In connection with the annexation of the Hawaiian Islands we are confronted with a new and serious problem in Public Medicine. This annexation, with the increased intermingling of the people of the islands and America, makes it necessary to exercise extra precaution against the introduction of leprosy into the United States. The disease is known to be difficult to recognize in its early stages; slow but insidious in its development; though contagious, not readily so; and takes fully a quarter of a century to establish itself in a country. It is, therefore, necessary that there should be constant care and caution in handling it.

In the weekly Public Health Report of the Marine Hospital Service, under date of December 30, 1898, Dr. D. A. Carmichael, U. S. M. H. S., gives a detailed report on leprosy in the Hawaiian Islands, which is of great value from a historical as well as scientific standpoint. A synopsis of his report will be of interest, especially at this time. It is dated November 29, 1898.

A number of statements are made relative to the introduction of leprosy into the Sandwich Islands. It is thought that the disease has existed in the Islands for nearly a century, the Chinese getting the credit for its introduction. Restrictive methods were instituted in 1865, when the legislature of the Kingdom of Hawaii enacted a law which provided for the segregation of all lepers. It was a drastic measure, providing for the arrest and delivery to the Board of Health of any person alleged to be a leper. Under the provisions of this law a hospital was established on an island three miles from Honolulu in November of the same year, but was abandoned in 1875. In 1866, the records showed a total of 274 cases in the Islands; mild segregation was kept up. After the abolition of the first hospital in 1875, many lepers were sent from time to time to the settlement on the island of Molokai; now all lepers are sent there. This settlement has gradually developed, and at present has six physicians, officers, dispensary, a bacteriological laboratory for the study of leprosy, churches, cottages, jail, store-houses, etc., and is probably the most complete settlement of its kind in the world. It is supported by the government at a cost of about \$67,000 per year. In 1898, it contained 1,073 lepers. Of the nationalities the Hawaiian furnishes the greatest number, the half-caste the next, and the Chinese next.

At one time it was thought that vaccination by means of humanized virus aided in the dissemination of leprosy, but it was not conclusively proven. Since 1888, bovine virus has been used. Dr. Arning is said to have proved the inoculability of leprosy. It is communicated by kissing, nose rubbing, cohabitation, reception of the secretions from lepers on abrasions of the surface of the skin or by inhalation, diglutition, or transmission by insects. The bacilli of leprosy was demonstrated by Dr. D. L. Alvarez, the leprologist of the Hawaiian government. Many people are not susceptible to the disease, and most of the white race seem to have a certain immunity. It is not hereditary. The prevailing types seen in the settlement are the tubercular and anesthetic, and occasionally the mixed form.

Little has been accomplished in the way of curative treatment; improved hygienic surroundings and tonics are relied upon principally. Serum therapy was tried by Dr. Alvarez, but was not very satisfactory. Notwithstanding the segregation, the number of cases has not diminished greatly. This is explained by the fact that the methods before the fall of the monarchy were very lax.

Precaution is necessary to prevent the introduction of the disease in the United States from the Hawaiian Islands. Restrictive methods should be adopted at the point of departure from the Islands and at the port of

arrival. Careful inquiry into the family and sanitary history of each immigrant, a rigid physical examination and disinfection of his effects should be made.

Dr. Carmichael's report is accompanied by fine, excellent and valuable plates, showing the different types of leprosy seen in the islands.

Important Bills in New York Legislature :—Assembly bill No. 1.

An Act "Authorizing Arial Lathrop and Katherine Beardsley Lathrop to make a gift to the Albany hospital under certain conditions." Introduced by Mr. Coughtry.

The bill authorizes the said Arial Lathrop and Katherine Beardsley Lathrop to make a gift of \$50,000 to the Albany hospital upon condition that said hospital shall dedicate two pavilions to the memory, one of the father and mother of Arial Lathrop and the other to the father and mother of Katherine Beardsley Lathrop; that the gift shall be known as the "Arial Lathrop endowment fund;" that said hospital shall pay \$1,250 annually to Arial Lathrop during his life, and the same to Katherine Beardsley Lathrop after the death of Arial Lathrop should she survive him. It also authorizes said hospital to accept the gift and to pay the annuity.

Passed the Assembly January 18, 1899.

Passed the Senate January 26, 1899.

Assembly bill No. 209; Senate bill No. 100. An Act "To prevent the introduction of tuberculosis into the dairy and other herds of cattle in the State of New York." Introduced in Assembly by Mr. Johnson, in Senate by Mr. Willis.

The conditions demanding legislation of this character are in part brought out in the editorial pages of this issue of the ANNALS. The essential provisions of the bill are that all bovine animals imported into the State of New York, excepting fat cattle for immediate slaughter, must be accompanied by the certificate of an approved veterinarian, stating marks of identification and giving the temperature records of a tuberculosis test made within thirty days preceding the importation; that a state inspector shall pass upon all such certificates; that all transportation companies are forbidden to receive cattle from any other state, for transportation into New York State, unless such cattle are accompanied by the required certificate and by a written permit of the New York State inspector; that no indem

nity shall be paid to owners of cattle by the State, for any tuberculous cattle that have been brought into the State after the passage of this act, without a certificate of having successfully stood the tuberculosis test. Violation of this act is made a misdemeanor and on conviction is punishable by a fine or imprisonment or both. We are told that the bill was drawn by Dr. J. A. Law of Cornell University. As it stands now it is better than no bill at all, but it would operate much more effectually if it were amended instructing the New York State inspectors to test *each* head of cattle as it enters the State. New York should not be required to accept certificates of tests made in every other state; it should stand alone and be governed only by the tests made by her own officials, the United States government inspectors excepted. As the bill now reads there would be the constant danger of bogus certificates being thrown in upon us with an increased importation of diseased cattle. It would not be possible for the State Board of Health to know the standing of every veterinary surgeon whose certificate would be sent into this State, and it should not be required to assume such a responsibility.

Senate bill No. 12; Assembly bill No. 60. An Act "To establish a state hospital in the forest preserve of the Adirondack mountains for the treatment of incipient tuberculosis and making an appropriation therefor." Introduced in Senate by Mr. G. A. Davis; in Assembly by Mr. Hill.

This bill followed the report of a committee from the Senate in 1898 to examine into the establishment of such a hospital. Its provisions are that the Governor, by and with the advice and consent of the Senate, shall appoint a board of trustees consisting of five citizens, who shall serve for three years with a salary of \$1,000 per annum and expenses during the erection and equipment of the hospital; that said board shall select the site for the erection of said hospital, such choice to be subject to the approval of the State Forest Commission, oversee its construction, establish its by-laws, rules and regulations, present annual reports of its work to the Legislature, appoint six resident physicians, two each from the cities of New York, Buffalo and Syracuse, and fix their compensation; and fix charges to be paid by patients; that the hospital shall furnish accommodation for at least two hundred patients besides the employees, and

shall be completed within two years after the passage of this act; that the sum appropriated for this work shall be \$200,000. At least two of the members of the board of trustees should be physicians. The appointment of the resident physicians should not be limited to three special cities, as New York, Buffalo and Syracuse. That is special legislation and objectionable.

Senate bill No. 183. An Act "To amend the public health law relating to the care and medical treatment at the Loomis Sanatorium, at Liberty, Sullivan County, N. Y., of persons suffering with tuberculosis, and making an appropriation therefore." Introduced by Mr. Ford.

The State Board of Health is directed to send to said sanatorium not more than one hundred patients per annum which shall be cared for at the expense of the State. Each patient sent shall have been a resident of the State for one year preceding admission. Application for such care and treatment to be made to the secretary of the State Board of Health. \$20,000, or any part thereof needed, is appropriated for the care of such patients.

Assembly bill No. 217. An Act "To amend the State Charities Law relating to the incorporating and regulating of dispensaries by the State Board of Charities." Introduced by Mr. Burnett.

The bill provides for a Board of Control for the supervision and regulation of dispensaries, which shall consist of twelve members appointed by the State Board of Charities, to hold office for two years, and consist of two members from the Medical Society of the State of New York, two from the Homeopathic State Medical Society, two from the Eclectic State Medical Society and six members *not* physicians. These societies shall make nominations annually, from which the State Board of Charities shall select the members of the Board of Control. Compensation of members of said Board shall be \$10 for each days service, no member to receive more than \$300 in any one year. Said Board of Control shall have general supervision of all dispensaries of the State, and make and enforce such rules and regulations as may seem necessary. All applications for charters shall be made to the Board of Control, upon *its* recommendation the State Board of Charities shall issue the charter.

Assembly bill No. 344. An Act "To allow cities of first-class to establish, equip and maintain, outside of their corporate limits and with the approval of the State Board of Health, hospitals for the regular treatment of the disease known as pulmonary tuberculosis." Introduced by Dr. Henry.

Provides that any municipal corporation having a population according to last State census of 250,000 or more shall have the power to erect, equip and maintain, within the State of New York, but not within its corporate limits, a hospital for the treatment of tuberculosis; that the State Board of Health shall approve of the lands selected for such purpose; that no municipality, corporation, person or persons, or association shall establish within the corporal limits of any municipal corporation included under this act, any hospital for the regular treatment of such disease, nor shall any hospital or institution now existing within such corporation receive for regular treatment persons suffering from said disease.

In Memoriam

EDWARDS HALL, M. D.

Dr. Edwards Hall, of New York city, an alumnus of Albany Medical College, died at his home, No. 17 East Sixty-sixth street, December 10, 1898. He was born in Middle Granville, Washington county, N. Y., October 16, 1818, and was, therefore, in his eighty-first year at the time of his death. He was the son of a Congregational clergyman. His education was very thorough. At the age of eighteen he entered Hamilton College, from which he was graduated in 1840.

For a time after his graduation he was assistant to State Geologist Prof. Ebenezer Emmons, and traveled extensively through the wildernesses of New York State, now known, and indeed named by Prof. Emmons, as the region of the Adirondacks.

After his connection with this department he decided to study medicine and began attending lectures at the College of Physicians and Surgeons, studying with the late Alexander Hosack, M. D., but was finally graduated from the Albany Medical College in the Class of 1844.

In 1846 he was appointed assistant resident physician to the

Children's Hospital on Blackwell's Island, where he remained for three years, during which time the hospital on Randall's Island was built and opened, and the thousand children transferred under his supervision. His experience in this hospital gave him an opportunity to observe and become thoroughly conversant with diseases of children. After leaving this hospital, he traveled for a time for his health and visited California at the time of the excitement of the mining and gold fever, in '49. His experiences there of the hardships of a miner's life were most interesting as told by himself. In 1851, Dr. Hall returned to New York city, determined to resume the practice of medicine, and in 1852, he married Miss Margaret Chambers, daughter of Robert Chambers, of New Jersey. Dr. Hall became very greatly interested in the New York Academy of Medicine and was one of the founders. He was trusted and loved by his medical brethren, and was at one time trustee of the Northeastern Dispensary of New York and of the College of Veterinary Surgeons. He also filled the office of president of the Board of Trustees of Rutgers's Female College. He was a member of the County Medical Society and of the New England Society, his eligibility for that society coming through his parents, his mother being doubly related to Ralph Waldo Emerson. He was for many years a member of the Fifth Avenue Presbyterian Church and greatly interested in the Chinese mission work of that church, and the devoted friend of the late Rev. Dr. John Hall.

Dr. Hall had been failing in health for some years, so his death was not entirely unexpected. His wife and two daughters survive him, Charlotte and Sara Frances. The latter is the wife of Dr. Eugene Austin, of New York city.

HORACE TRACY HANKS.

EVERT P. VAN EPPS, M. D.

Evert Peek Van Epps, M. D., died at Schenectady, N. Y., January 7, 1899.

He was born in Schenectady, May 22, 1849, of Holland Dutch ancestry, who settled in the Mohawk Valley at an early day, and was the son of Andrew C. and Catalina Van Epps.

He was graduated from the Classical Institute of Schenectady in 1866, and at once entered his father's store as a clerk, where he remained until '79, when he began the study of medicine in the

office of Dr. Alex. M. Vedder, with whom he remained for two years, when he entered the Albany Medical College, from which he was graduated in March, 1881. He at once commenced practice in his native city, which continued up to the time of his death. In January, 1882, he became a member of the Schenectady County Medical Society. In 1888, he was elected secretary and served three years. He was vice-president for 1891 and 1892, and president for 1893.

For ten years he has been a member of the Holland Society of New York. He was also a member of St. George's Lodge, No. 6, F. and A. M.

Dr. Van Epps was esteemed by all who knew him as a man of excellent qualities of both mind and heart, candid, forceful and conscientious in the discharge of his duty. During the whole of his career he occupied a highly honorable and noteworthy position in the medical profession of Schenectady county.

J. L. SCHOOLCRAFT.

STEPHEN HENRY WEBSTER, M. D.

Dr. Webster died at his home, No. 817 River street, Troy, N. Y., January 6, 1899. He had been ill for some time with valvular disease of the heart, and despite his otherwise sturdy frame and his strong battle for life the end was not unexpected.

He was one of twins born in Troy, October 27, 1865, and had always resided in Troy. He received his preliminary education in the Troy schools, and early in life evinced a desire to become a physician. He took a course at the Albany Medical College and was graduated with the Class of 1886. Afterward he attended the Polyclinic in New York; and studied a year at Vienna, Prague and Berlin, returning fully equipped for his chosen profession. He established an office and his ability and popularity brought him prosperity. He was married November 12, 1895, to Miss Maybelle L. Carpenter, formerly of Providence, R. I., with whom he lived a happy life. A member of the Rensselaer County Medical Society, he had contributed much to its success. He was kind, charitable, honorable and faithful, and during his professional career, which gave so much promise for the future, had been called in many cases of importance. As a friend, he was true, yet reserved; wise in his counsels, careful in his words and honest in his convictions and dealings.

To the members of his family he was devoted, and his married life was an especially happy one. He is survived by his wife, mother, two brothers and two sisters.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY COUNTY MEDICAL SOCIETY.—The third intervening meeting of the Medical Society of the County of Albany was held on Wednesday evening, January 11th, in Alumni Hall. In the absence of the President, Dr. William Hailes presided. Dr. W. F. Robinson spoke on the Health of the Troops at Camp McKinley. The discussion was opened by Dr. Vander Veer, followed by Drs. Griffith, Curtis, Hailes and Smith. Dr. L. E. Blair then read a paper on "Benzoinol and Resorcin Compound."

ALBANY BOARD OF HEALTH.—Since the resignation of Dr. Lewis Balch as health officer, several months ago, the members of the Board of Health have kept the resignation on the table, hoping that Dr. Balch would return; but it seems that army life is too attractive for him. Major Balch has been health officer for thirteen years, and the great improvement in the city's sanitary condition has been due, to a great extent, to his ability and firmness.

After his return with the Second Regiment, Major Balch was appointed brigade surgeon, and accompanied a regiment to Cienfuegos, where he was later appointed sanitary inspector of Cuba.

The vacancy caused by the resignation has been filled by the Board of Health, Dr. Theodore P. Bailey having been chosen as his successor.

The faculty of the Albany Medical College has not yet appointed Professor Balch's successor. Dr. Andrew Macfarlane is now lecturing on Medical Jurisprudence and Hygiene.

ALBANY MEDICAL COLLEGE ALUMNI ASSOCIATION OF THE CITY OF NEW YORK.—The fourth annual banquet and reunion of the association was held at the Hotel St. Denis, on Thursday evening, January 19th. The guests of the evening were: Rev. Henry W. Brann, D. D.; Colonel Charles A. Woodruff, Dr. Samuel R. Morrow, who represented the faculty of the college; James H. Kennedy and Dr. M. L. Rhein. President A. V. V. Raymond was not able to be present. Dr. Morrow reports an enjoyable reunion and an excellent banquet. Speeches were made by the guests of the evening and the President of the association, Dr. R. B. Burton ('55). Besides the above-named gentlemen, the following members were present: Drs. Charles Kiested ('46), J. W. Warner ('47), H. T. Hanks ('61), J. P. Kimball, John E. Flaherty ('64), Edwin Barnes ('68), William Stevens ('75), M. J. Lewi ('77), Allen Fitch, C. DeW. Van Dyck ('79), M. L. Rhein ('80), W. C. Spalding, Secretary

('81), L. N. Lanehart ('83), J. A. Cutler, George H. Baker ('86), H. F. C. Müller ('87), Robert F. Macfarlane ('88), F. B. Stillwagen ('94), A. Parker Muir, Erving Holly and W. E. Falkenbury ('96).

ALBANY HOSPITAL BAZAAR.—The recent report of Mr. Gerritt Y. Lansing, Treasurer of the Hospital Bazaar Committee, shows that the net profits are about \$16,704. The committee in charge are to be congratulated on the very successful results. Miss Jessie K. Myers was president of the general committee of ladies; the vice-presidents were Mrs. Simon W. Rosendale, Mrs. Horace G. Young, Mrs. Edward Hun, Mrs. John H. Farrell, Mrs. Samuel L. Munson, Mrs. Albert Vander Veer, Mrs. Robert Shaw Oliver, Mrs. William L. Learned (for whom Mrs. Willis Tucker served), and Mrs. Edward G. Cox; treasurer, Mrs. Francis Shields; secretary, Mrs. Jane S. Knowles.

The general committee of gentlemen was composed of Mr. Charles Visscher Winne, chairman; Mr. Edward Bowditch, Mr. John V. Norton, Mr. Marcus T. Reynolds; treasurer, Mr. G. Y. Lansing.

The general booths netted the following sums: The doll booth, in charge of Mrs. Horace G. Young, \$973.97; the candy booth, in charge of Mrs. John H. Farrell, \$400; the basket booth, in charge of Mrs. Edward G. Cox, \$266; the colonial booth, in charge of Mrs. Simon W. Rosendale, \$1,549.10; the Dutch booth, in charge of Mrs. Albert Vander Veer, \$2,648.58; the bazaar newspaper, in charge of Mrs. W. Howard Brown, \$529; the Japanese booth, in charge of Mrs. Edward R. Hun, \$345.20; the Red Cross booth, in charge of Mrs. R. S. Oliver, \$1,890.37; the pandemonium department, in charge of Mrs. Samuel L. Munson, \$1,500; subscriptions, etc., \$217.74; the evening performances, \$3,440.80; the cloak-room, \$87.55; season tickets, \$1,875.20; the art booth, in charge of Mrs. Willis G. Tucker, \$1,896.19. It is quite probable that this amount will be somewhat increased when the general committee meets.

GENERAL MEMORIAL HOSPITAL.—It is officially announced that the New York Cancer Hospital will hereafter be known as the General Memorial Hospital.

UNIVERSITY OF DUBLIN, IRELAND.—Dr. James Little has been made Regius Professor of the Institute of Medicine at the University of Dublin, to succeed Sir John Banks.

THE JENNER INSTITUTE OF MEDICINE.—It has been recently announced that Baron Iveagh, one of the Guinness family of Dublin, has given \$1,250,000 to this institute for the promotion of scientific research tending to the prevention of disease.

PROFESSOR STRICKER'S SUCCESSOR.—Philip Knoll, Professor of Experimental Pathology at the German University of Prague, will occupy the same chair in the University of Vienna, made vacant by the death of Professor Stricker.

ISAAC LEWIS PEET, LL. D.—The Emeritus Principal of the New York Institute for the Instruction of the Deaf and Dumb was born at the

American School for the Deaf at Hartford, Conn., where his father was an instructor and where his seventy-two years have been spent in the work.

ETHERION.—Mr. Charles F. Brush claims to have discovered a new gas in the air, which he has named Etherion, because it possesses some of the properties of the ether, which, by hypothesis, is the conducting agent through space of the radiations of heat, light and electricity.

MEDICAL MEN AS AUTHORS.—Blackwood & Sons, of London, are now publishing a new play, entitled "The Good Regent," by Sir Thomas Grainger Stewart, Professor of Medicine in the University of Edinburgh, and one of Her Majesty's physicians in Scotland.

JOHN B. HAMILTON, M. D., LL. D., former Surgeon-General of the United States Marine Hospital Service, and editor of the Journal of the American Medical Association, died at Elgin, Ill., December 24, 1898, of typhoid, due to perforation of the intestines. He was Professor of Surgery at the Rush Medical College and the Chicago Polyclinic; Surgeon to the Presbyterian Hospital; Consulting Surgeon to the St. Joseph Hospital and the Central Free Dispensary.

NEW HAVEN'S MILK SUPPLY.—Some capitalists of New York city, who have sons at Yale, and others at New Haven, have organized a company which will control the milk supply of that city, a feature of the plan being to secure scientific sanitary conditions in the handling of the milk. All the local milk dealers have been bought out.

PROFESSOR ROENTGEN.—In December it was announced that Professor Roentgen would resign his position as Professor of Physics at the University of Wurzburg to take the chair of Physics at the University of Leipzig; but lately we are informed that he has refused to accept the call, as he prefers to retain his present position. Professor Wiederman, who holds the chair at present in the Leipzig University, will retire at the end of the present semester.

A POSITIVE TEST OF DEATH.—The laity, and especially those who fear they may be buried alive, might be pleased to know that the X-rays may be successfully used. The slightest movement of the heart blurs the skiagraph, and if this is not found, death is certain. France has already used this test successfully, while Russia and Austria are thoroughly investigating this method.

THE ASSOCIATED PHYSICIANS OF LONG ISLAND.—The annual meeting of this association was held Saturday, January 21st, at the Union League Club, Brooklyn. Papers were read by Drs. Lanehart, of Hempstead; William P. Dudley, of Brooklyn, and George McNaughton, of Brooklyn. Several public clinics were arranged for the visitors by Drs. Skene, Pilcher, Bristow, Delatour and Clayland. The evening was devoted to a social session, dinner being served at the club.

NEW YORK ACADEMY OF MEDICINE.—On December 15th, at the meeting of the New York Academy, the following officers were elected for

the ensuing year: President, William H. Thomson; Vice-President, Hermann Knapp; Trustee, E. G. Janeway; Treasurer for the trustees, W. F. Cushman; member of committee on library, A. Caille; delegates to the State Society, J. H. Huddleston, E. Lefevre, L. F. Bishop, J. A. Booth and James Ewing. Dr. Abraham Jacobi had withdrawn his name from nomination for the office of trustee.

THE ROCKY MOUNTAIN INTER-STATE MEDICAL ASSOCIATION.—During the summer there will be a meeting of this association at Salt Lake City, at a time to be decided upon by the executive committee. The officers are as follows: President, Dr. C. P. Hough, of Salt Lake City; Vice-Presidents, Drs. Charles K. Cole, of Helena, and Clayton Parkhill, of Denver; Treasurer, Dr. E. Stiver, of Rawlins; Recording Secretary, Dr. S. C. Baldwin, of Salt Lake City; Corresponding Secretary, Dr. S. D. Hopkins, of Denver.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—At the Eleventh Annual Meeting held at Memphis, Tennessee, December 6th, 7th and 8th, 1898, the following officers were elected for the ensuing year: President, Dr. Joseph T. Johnson, Washington, D. C.; Vice-Presidents, Drs. F. W. Farham, New Orleans, and W. L. Robinson, Danville, Va.; Secretary, Dr. W. O. B. Davis, Birmingham, Ala.; Treasurer, Dr. A. M. Cartledge, Louisville, Ky. The next meeting of this association will be held at New Orleans,—time not yet determined.

RECENT APPOINTMENTS IN NEW YORK HOSPITALS.—Dr. Robert H. M. Dawbarn has been appointed visiting surgeon to the City (Charity) Hospital, vice Dr. Wylie, resigned. Dr. Francis J. Quinlan was recently appointed Laryngologist and Rhinologist to Charity Hospital, Blackwell's Island, by order of the Commissioner of Charity. Dr. Max Rosenberg is now Admitting Physician to Mount Sinai Hospital. Dr. Thomas H. Manley has been reinstated as Visiting Surgeon to the Harlem Hospital, and Dr. R. S. Wiener has been appointed Attending Physician to the same institution. Dr. H. M. Silver has been reappointed to the Visiting Staff of the Gouverneur Hospital.

Dr. L. Duncan Bulkley has inaugurated a series of clinics on diseases of the skin every Wednesday afternoon at the New York Skin and Cancer Hospital. The course is free to the medical profession.

MEDICAL HEROES.—The Victoria Cross has been recently conferred upon Surgeon William Job Maillard, M. D., of the Royal English Navy, for conspicuous bravery during the outbreak in Candia, September 6, 1898. During the landing of the steamer from Her Majesty's Ship "Hazard," Surgeon Maillard, after having reached a place of safety, returned to secure a seaman who had fallen back wounded into the boat, and was only prevented from doing so because the boat was adrift and he could not lift the man from so unstable a platform. The surgeon's clothes were riddled, but he himself suffered no harm.

The Cross of the Legion of Honor has been conferred upon M. le Dr. Barter, a young surgeon of the French Navy. The official record

describes the deed as having been performed during the attacks of the 4th and 8th of November, 1897, while serving with the Borgan Column. This officer despising death, completed his difficult duty beside the wounded under a perfect rain of arrows.

PERSONAL.—Dr. Edgar Vander Veer (A. M. C., '98), sailed December 24th for Europe. He will spend some months in Heidelberg and Munich, and will then attend the University at Vienna.

W. L. Wilson, M. D. (A. M. C., '98), has been appointed resident physician at the Saratoga Hospital, Saratoga Springs, N. Y.

Dr. R. L. Ellithorpe (A. M. C., '97), has been reappointed Health Officer of Johnstown, by the mayor of that city, for the year 1899.

F. H. Stephenson, M. D., of Syracuse, N. Y., announces that he has withdrawn from general practice, and will confine himself exclusively to the specialty of nervous and mental diseases.

Dr. Arthur G. Root attended the meeting of the American Laryngological, Rhinological and Otological Society, held at Washington, D. C., January twenty-eighth.

Book Reviews

The Principles and Practice of Medicine. Designed for the Use of Practitioners and Students of Medicine. By WILLIAM OSLER, M. D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Third Edition. Entirely Revised and Enlarged. New York: D. Appleton & Co.

Dr. Osler's text-book is so widely known, not only in the United States, but in all "Greater Britain," that little is left for the reviewer in the way of exploiting its excellence. Its individuality consists in the wide recognition given to the achievements of others, and the keen and critical comments upon all the advances in scientific and practical medicine. The reader, if not previously informed, may learn, for instance, that Naunyn has placed the conception of cholelithiasis upon a substantial basis; that the literature of diabetes mellitus has been enriched by Pavy, Saundby, von Noorden, Williamson and Naunyn; that the recognition of the hysterical nature of the traumatic neuroses by Walton and Putnam placed these conditions upon a different and more exact footing. In almost every chapter are to be found references to other investigators, many of the citations from the literature being from contributions made within a few weeks of the date of publication of the book. In no way has this richness of quotation detracted from the value of Dr. Osler's work, but serves for the wider dissemination and better assimilation of the ideas of

others, which become all the more valuable and available from the sifting process through which they have passed. The book thus renders the double service of conveying the latest medical knowledge and of illustrating the cosmopolitan methods which have placed its author in the front rank of the practitioners of the day.

The evolution of three editions in six years reveals a marvellous industry, modestly indicated by the author in the statement, "At the present rate of progress in all departments, a text-book six years old needs a very thorough revision." Many articles have been rewritten or are new, and into many of the sections, as those on typhoid fever, tuberculosis, rheumatic fever, diabetes, gout, arthritis deformans, parasitic diseases, diseases of the blood, heart, lungs and kidneys, much new matter has been incorporated. The section on diseases of the nervous system has been recast upon the basis of the neurone concept. Albany readers will be pleased to note that the work of Dr. Hun upon alcoholic neuritis, and of Drs. Curtis and Lartigau upon the bacillus pyocyaneus, have received due recognition. It is noticeable that the chapters upon acute pneumonia and rheumatic fever have been transferred to the class of specific infectious diseases. A London contemporary chronicles this among the advances of the "*Annus medicus, MDCCCXCVIII*," and regards this disposition of rheumatic fever as a "courageous act." Any doubts upon the propriety of this will probably be soon removed.

In these days of Anglo-Saxon fellowship, it is interesting to note that a Canadian may be adopted by the United States, and that his work may be honored in the United States and in Great Britain and its colonies alike. Dr. Osler's book is one of the few American works officially adopted by the universities of the mother country, and practitioners in any English-speaking community can ill afford its omission from their shelves.

Internal Medicine and Clinical Diagnosis. By CHRISTFRIED JAKOB, formerly First Assistant in the Medical Clinic at Erlangen. Edited by Augustus A. Eshner, M. D. With 182 colored illustrations. Philadelphia: W. B. Saunders, 1898.

A Manual of Physical Diagnosis. For the Use of Students and Physicians. By JAMES TYSON, M. D., Professor of Clinical Medicine in the University of Pennsylvania. Third Edition, revised and illustrated. Philadelphia: P. Blakiston, Son & Co., 1898.

Medical Diagnosis. By OSWALD VIERORDT, M. D., Professor of Medicine at the University of Heidelberg. Translated by Francis H. Stuart, A. M., M. D. Fourth American Edition, from the Fifth German. Revised and Enlarged. Philadelphia: W. B. Saunders, 1898.

The publication of these three works on physical diagnosis indicates the demand for, and the application of books dealing with the purely diagnostic side of medicine as developed in the last decade.

Jakob makes abundant use of the modern methods of illustration as a valuable means of conveying instruction. Pathological conditions determined by microscopical and chemical means or by the methods of physical diagnosis are clearly and graphically shown by the numerous colored

illustrations, which, in correctness of coloring and exactness of details, are both artistic and thoroughly scientific. The seventeen plates, which diagrammatically represent diseases of the abdominal organs, make these often obscure diseases, with all their phenomena, much more easily understood. The last half of the volume, consisting of 242 pages, deals with the examination of the patient, methods of investigation, special diagnosis of diseases of the internal organs, examination of abnormalities of metabolism, the most important parasites, epitome of special pathology and treatment, and therapeutic notes. The amount of matter is simply bewildering, and, although it is clearly and scientifically presented, it would have been much more satisfactory if compiled and made a separate volume. This work certainly reflects credit upon its author, and is only additional evidence of the painstaking care and thoroughness of the German scholar. The volume is a very valuable addition to our works on diagnosis, and can be strongly recommended both to students and practitioners.

Dr. Tyson's small octavo volume is an epitome of the results of an extensive and successful experience in medical teaching. Thoroughly personal and practical, it contains just what the student of this subject needs. It is strictly limited to physical diagnosis, except that there is added an appendix, which contains the examination of the blood, the examination of the gastric contents, the Roentgen Ray in diagnosis, and directions as to the making of an autopsy. There are two full-page illustrations, showing the life cycle of the malarial organisms. The fact that this work has, in a short time, reached its third edition is proof of the well-deserved success which it has met.

It is just a decade since the first German edition of Professor Vierordt's volume on Medical Diagnosis was issued, and although many works on this subject have appeared since that time, this pioneer continues, deservedly, to be a favorite. This work, which has passed through four American editions, needs, at this late day, no words of special commendation. Its value is known and its pages are frequently consulted by physicians of many different nationalities. It has kept abreast of the marvellous advances in every field of diagnostic medicine, and is to-day a veritable treasure-house of scientific knowledge.

A Primer of Psychology and Mental Disease for Use in Training-schools for Attendants and Nurses and in Medical Classes. By C. B. BURR, M. D., Medical Director of Oak Grove Hospital for Nervous and Mental Diseases, Flint, Mich.; formerly Medical Superintendent of the Eastern Michigan Asylum; member of the American Medico-Psychological Association, etc. Second Edition, Thoroughly Revised. Pages ix-116. Extra cloth, \$1.00 net. The F. A. Davis Co., publishers, Philadelphia, New York city, Chicago.

The need of a standard of instruction in mental diseases for nurses in institutions for the insane has long been felt. It is obviously impossible to educate a nurse in the intelligent appreciation of mental cases, without some knowledge of psychological science, and it has always been difficult

to place limitations upon this special knowledge to bring it within the comprehension of the average nurse. Dr. Burr's book seeks to meet this want. It opens with a glossary of the commoner terms. The initial chapter on Psychology describes Thinking, Feeling, Emotion and Volition, with other functions of the Mind, as introductory to the discussion of perverted mental action. The chapter on Insanity includes brief and pointed explanations of its commoner manifestations, and is followed by one upon the Management of Cases. This might be read with propriety by nurses in general training-schools, who, it is well known, do not so easily acquire the tact and sympathy which are developed in those who have had experience with the insane.

Dr. Burr's long experience in the management of hospitals for the insane entitles his writings to attention, and it is a pleasure to note that the demand for this work in one of the by-ways of medical practice has necessitated a new and enlarged edition.

The Sexual Instinct: Its Use and Dangers as Affecting Heredity and Morals.

By JAMES FOSTER SCOTT, B. A., M. D., C. M. Published by E. B. Treat & Co., New York, 1899.

This little work is a vigorous, plain and outspoken denunciation of the Social Evil. The subject at best is unpleasant to dwell upon, but the author describes the causes and the results of sexual immorality in a vivid manner, and though one cannot but have a feeling of disgust in reading it, he is impressed with its realism and with the earnestness of the author. The final chapters are devoted to the evil results of sexual immorality, criminal abortion, gonorrhœa, syphilis and the several perversions.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

Infection by the Pneumococcus—Brodie, Rogers and Hamilton (*The Lancet*, Oct. 22, 1898), report a peculiar epidemic affecting Kaffirs in the Transvaal. In a previous communication (1894) the same authors reported a number of cases among the same race under the title of Acute Specific Rhinitis. The victims of the epidemic had traveled from a warm and comparatively moist sea climate to a high, dry and cold one, to work in a mine one thousand feet below the surface, the change involving new habits, diet, and surroundings. Many were affected with colds and coughs, complicated with pneumonia, dysentery, diarrhœa, parotitis, and in two cases with meningeal symptoms. The most prominent symptoms were nasal catarrh and coughs, unaccompanied by signs of bronchitis or broncho-pneumonia, but in a great many cases, associated with lobar pneumonia. The pneumonia was not a guide to prognosis, nor was pleurisy, or parotitis. The diar-

rhoea, however, was frequently severe, and in several of the cases assumed a dysenteric character, this symptom being invariably unfavorable. The evacuations toward the close of the disease became entirely haemorrhagic, mostly dark-colored, sometimes black, and simulating the motions found in *purpura haemorrhagica*. A diseased condition of the mucous membrane of the nose was found in all of the necropsies. In all of the necropsies a greenish, thick purulent discharge was observed in the nostrils. The nasal mucosa, including that of the adjacent sinuses, showed every stage of inflammation. Sloughs were observed in the vault of the pharynx and on the upper turbinated bones. Within the skull purulent infiltration of the arachnoid and pia mater extended backwards, usually from the optic groove, or in some cases from the crista galli to the foramen magnum. The meningitis followed generally the various processes of the membrane. Croupous pneumonia was present in a majority of the cases, all stages of the process being represented, from congestion to gangrene. In no case was endocarditis found. The peritoneal cavity usually showed a considerable amount of fluid. Perihepatitis and perisplenitis were marked features in one case. Fifteen cases were submitted to a complete bacteriological examination. In every case cultivations were made on gelatin, agar agar, blood agar, and in broth. These were taken (a) from the pus in the nasal fossae, and in the nasal, frontal, sphenoidal, ethmoidal and superior maxillary sinuses; (b) from the purulent exudate in the arachnoid, spinal and cerebral; (c) from the fluid in the cerebral ventricles; (d) from the pericardial, peritoneal, and pleuritic fluids; (e) from the heart blood and blood in the cranial sinuses; and (f) from the lungs, kidneys and spleen. The pure cultures were found to consist of lanceolate micrococci, nearly always united in pairs, and tending in old cultures to grow into chains, rarely occurring in single cocci. In recent cultures, particularly on blood agar, the cocci were surrounded by a transparent halo-like capsule. The authors describe fully the action of the coccus discovered, including the result of inoculation experiments, and derive the following conclusions:

1. That this diplococcus is identical with the pneumococcus of Fränkel, but that probably it is of more virulent type.
2. That the pneumococcus is the specific factor in the causation of cerebro-spinal meningitis.
3. That in these cases the pneumococcus first effects the nasal mucous membrane and produces there a definite local lesion (rhinitis), and that all other subsequent pathological effects — infection of frontal and nasal sinuses, middle-ear suppuration, parotitis, pneumonia, meningitis, etc. — are merely the result of the extension of the organism along various anatomical channels of infection e. g., continuity of tissues, lymphatics, and blood-stream.
4. That a pneumococcic septicaemia, the result of a pneumococcic rhinitis, even when unattended by such secondary effects as pneumonia or meningitis, is sufficient to cause death.

The writers believe that the observations they have recorded are illustrations of the multiform effects of an equally definite organism, and that

further research will establish the contention that a general infection by the pneumococcus with its diverse lesions is often the complement of an unsuspected acute specific rhinitis.

Cryptogenetic Septicæmia. — Vierhuff (*St. Peters. Med. Woch.*, 1898, No. 40), defines this as a septic condition arising from the presence of pus cocci — generally streptococci and staphylococci and their toxins — in the blood, without the possibility of determining the atrium of invasion. In many cases autopsy reveals the point of invasion, but not infrequently even here, after the most careful and searching investigation, the effort is fruitless. As portals of entrance there may be small wounds of the skin or of the mucous membrane of the nose and mouth, the tonsils, or the maxillary and salivary glands, so small as to be overlooked, and which may have been healed up until the outbreak of the disease. The poison may further enter the lymphatics in any portion of the body, and sooner or later be carried along, either in the lymph current or the blood current. Infection through the lungs, the large glands of the abdomen, the genitalia and the intestine may also take place. There should also be considered the forms of infection, the so-called mixed infections by which general diseases are complicated by sepsis, as, for instance, the septic form of typhoid fever, scarlatina, gonorrhoeic general infection, and others.

The author reports fifteen cases, and reviews the literature, and finds that the cases may be classified as follows:

1. Those with predominating general symptoms.
2. Those with symptoms on the part of the heart and circulatory apparatus.
3. Diseases of the bones and joints.
4. Those with manifestations in the skin, in the subcutaneous connective tissue, in the muscles, in the mucous membranes, and in the serous membranes.
5. Those with pronounced manifestations in the lungs, the large glands of the abdomen, the stomach and intestinal canal.
6. Diseases of the central nervous organs and the sensory organs.

The writer reviews in some details the symptoms, and draws from his cases and observations the conclusion that cryptogenetic septicaemia is an acute infectious disease of the severest nature, of which the characteristics are: Severe effects upon the general health, quick overpowering of the patient, chills, anaemia, icterus, exanthemata of various forms, high pulse and respiration rate, with marked disturbance of the ratio normally existing between pulse and respiration, a typical fever of pronounced intermittent character, and greater or less disturbance of the various organs.

The author closes his suggestive and instructive contribution with a brief consideration of the differential diagnosis.

Morphia in Bright's Disease. — In 1873 in the *New York Medical Record*, Dr. Loomis stated that he had treated uraemic convulsions by the hypodermic administration of morphia with marked success; in *The Lancet*, of August 3d and 10th, 1889, Dr. Stephen Mackenzie confirmed his conclusions. At the recent annual meeting of the American Medical Associa-

tion, Dr. Sydney Ringer, of London, read a paper on this subject; "The Use of Morphia in Bright's Disease," which was published in the Journal of the Association on October 8th. Dr. Osler writes concerning uraemia: "For the restlessness and delirium, morphia is indispensable. Since its recommendation by Stephen Mackenzie I have used this remedy extensively, and can speak of its great value in these cases. I have never seen ill effects or tendency to coma follow." Dr. Ringer entirely confirms these statements. He finds that morphia, hypodermically employed, is of conspicuous benefit in uraemic dyspnoea and in uraemic asthma. But, of course, dyspnoea due to dropsy of the lung, or fluid in the chest, is not benefitted. Also, the headache and sleeplessness of uraemic patients can generally be removed. Dr. Ringer has not employed this treatment in uraemic convulsions or coma, but has largely used it for other uraemic troubles, and is certain that it may be employed in these cases without risk, and with every prospect of benefit.—*The Lancet*, November 5, 1898.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Typhoid Fever in Children During the Epidemic of 1896 at Nancy.—By MON. HADOTE, ANGEL AND FRUHINSCHULTZ. (*Revue Medical del' Est*, 1898.)

In the service of M. Hanshalter from November, 1893, to the end of March, 1896, there occurred 107 cases, the greater number during the autumn months. As to the age the maximum was between 7 and 12 years; one case at 1½; 12 between 2 and 4; 24 between 4 and 7, etc.

In the epidemic of the summer of 1896, there were 57 cases among children, the youngest being 5½ months of age. Out of the 107 cases, 63 were boys, while in the epidemic of '96 there were more girls than boys.

Symptoms.—Attack usually sudden, sometimes preceded by prodromes. Initial convulsions have been noted. Diarrhœa appeared early. Anorexia, lassitude, cephalalgia, abdominal pain and vomiting have been frequently met with. Vomiting occurred thirty times in fifty-seven observations in last epidemic, epistaxis only twelve times. Rose spots have been relatively infrequent, occurring in less than half the cases, being either discrete or numerous. Somnolence and stupor have not been in proportion to the elevation of temperature. Diarrhœa was often absent in the beginning and in certain epidemics constipation was the rule.

Defervescence habitually by lysis. In the first series of 107 cases, there were ten relapses, in two of which rose spots reappeared. All terminated successfully. In the second series of fifty-seven cases, there were six relapses (two with rose spots), one child having two successive relapses, one nineteen days after six days of apyrexia, the other of fourteen days after forty days apyrexia, which appeared like an initial attack. One girl of six years—treated in November, 1895, for typhoid—

re-entered the hospital in July and October, 1896 for two re-attacks of the same malady.

Albuminuria was rare in the last epidemic, it being present five times (grave cases), in fifty-seven cases. It was moderate and soon disappeared.

Sudamina and desquamation were constantly present during convalescence. The pulse was rapid and dicrotic in the early stages, slow and irregular during convalescence.

Mortality rate of last epidemic was four per cent; in the first, seven and one-half per cent. Complications noticed were suppurative parotitis in one case on the thirty-fifth day; one of peritonitis by perforation on the twenty-first day; there were two of broncho-pneumonia, one of purulent pleurisy. In ninety-six cases, in which the duration could be calculated forty-eight lasted less than twenty days; twenty-nine between twenty and thirty days; nineteen above thirty days.

Treatment of Pneumonia in Infants and Children.—CHAPIN, HOLT, KOPLIK and others. (*Medical News*, Nov. 19, 1898.) A series of papers read in the section on Pediatrics of the New York Academy of Medicine, November 10, 1898.

Chapin discussed "The Management of the Fever of Pneumonia." He says, and all agree with him, that all measures that will have a bad effect secondarily should be avoided. The coal-tar derivatives are contra-indicated. Ice packs on the head and cold compresses on the chest, keeping the extremities warm, will produce the desired result.

Holt summed up his article on "The Treatment of Pneumonia in Very Young Children," as follows:

1. No depleting measures are ever admissible.
2. Hygienic treatment, including fresh air, proper feeding and intelligent care is of the utmost importance.
3. No unnecessary medication should be permitted.
4. Many annoying symptoms may be relieved by local treatment, such as the cough by inhalations, pain by counter-irritation, restlessness by the ice cap or sponging.
5. Stimulants should be deferred until demanded by the condition of the pulse.
6. High temperature is much more safely and effectively controlled by the use of cold than by drugs.
7. Greater caution is necessary in the use of powerful stimulants than is generally observed.
8. Rest is quite as important as in other serious diseases.

Koplik says that in acute heart failure, the main reliance must be placed on hypodermatics of alcohol and ether. Where there is threatened or actual œdema of the lung, he believes nitroglycerine is contra-indicated—its action being too rapid and evanescent. Strychnine gr. 1-400 hypodermatically is a useful drug. He thinks poultices are not justified on any scientific grounds. Opium is badly borne and is distinctly contra-indicated in weakly or semi-idiotic infants.

"The Treatment of Broncho-Pneumonia Complicating Measles," is considered by Carr. He agrees with the other writers that antipyretics

of the coal-tar class, cough mixtures with emetics and nauseating drugs are best omitted, but he finds that nitro-glycerine holds an important place, especially when the heart's action is weak, with pale skin and poorly filled arteries. He also prefers the nitrate of strychnine to the sulphate.

Baruch, who considered the hydrotherapy in the pneumonia of children, takes as the guiding principle that one should *treat the child and not the disease*. He would not allow baths under a temperature of eighty degrees F. Spontaneous reaction must always be provided for by friction during the bath. The internal administration of cold water is of great importance and should be given systematically every two hours, alternating hourly with milk.

Congenital Syphilis.—Comby, of Paris, in a discussion on congenital syphilis before the British Medical Association, dwelt on the importance of its early recognition. In some cases there was a skin eruption, as pemphigus; in other cases perfect health for several weeks, then mucous tubercles of the ano-genital regions, labial fissures and syphilides of the face appeared. Then there was a characteristic facies; complexion pale, skin and mucous membranes anæmic, and at the natural orifices there was an irregular, ill-defined, dull, earthy coloration, with the characteristic chronic, obstinate, sanious coryza.

When there was a papulo-squamous eruption on the forehead, lips or genitals, with fissures of the mucous membranes and crusts about the face, simulating impetigo or eczema, with this earthy complexion, it was a case of hereditary syphilis. About the buttocks and ano-genital regions a lenticular erythema, with raised squamous or vegetating patches, was often found. When there was no eruption either on face or buttocks the diagnosis was more difficult, but persistent coryza should always excite suspicion. Dental erosions, deafness, Hutchinson's keratitis were of serious import, while periosteal and subcutaneous gummata, deformities of the tibia and perforation of the palate were purely syphilitic phenomena. Treatment of the mother was useless except for prophylaxis. For the child mercurial injections continued for two or three years, but omitted every third month. Iodide of potassium should be given after the second year of treatment.

Rheumatic Carditis in Children.—Lees, in a discussion before the British Medical Association, called attention to the fatal character of acute rheumatism in children. This result is not due to endocarditis, but to pericarditis of a plastic type and to dilatation of the heart. In nine out of 150 cases was it found to be normal, and was more or less adherent in seventy-five per cent, and in fifty per cent this adhesion was complete and total. Murmurs are therefore of comparatively small importance in the immediate prognosis, but it is essential to determine (1) evidence of pericardial friction, (2) evidence of cardiac dilation. This cardiac dilation is not only due to the weakening effect of the pericarditis, but to the toxic effect of the rheumatic poison on the cardiac muscle.

Light percussion will demonstrate an increase of cardiac dullness to

the left; the cardiac impulse is feeble and diffused, and the maximum impulse is in the nipple line or to the left. The first sound is altered in character.

A child who has had repeated attacks of rheumatism may thus have a very great dilatation of the heart. The number of cases of pericardial effusion is very small; in not more than twelve in 150 cases was the amount more than two ounces, and its diagnosis was difficult by dullness extending to the third and second intercostal space, by dullness in the fifth right space, or by the shape of the area of dullness.

The simple adhesion of the two pericardial surfaces does not seem to do much harm, except that it renders permanent an acute dilatation. Systolic murmurs at the apex indicate a mitral regurgitation, which plays a minor part in the production of the heart failure. The presence of a presystolic murmur does not always mean definite mitral stenosis, which lesion is rare in children under twelve, only found nine times in 150 necropsies. Narrowing is a slow process, and takes years. Aortic murmurs are much rarer than mitral, and of little value in immediate prognosis. Care should be taken in not attributing to aortic disease a soft double sound at the base, which may be the first indication of pericarditis.

The prognosis in rheumatic heart disease must be founded mainly on three facts—the amount of cardiac dilatation, the presence or absence of pericarditis, and the evidence of fresh rheumatic toxæmia.—*British Med. Journal*, Oct. 15, 1898.

BACTERIOLOGY AND HYGIENE

Edited by A. J. Lartigau, M. D.

The Action of the Diphtheria Toxine Upon the Nervous System.—By EZIO LUISADA and DANTE PACCHIONI (*Il Policlinico*, Vol. V, fac. 7 and 8, p. 297-348.) The authors studied the action of the diphtheritic toxin upon the nervous system by direct contact of the poison with the tissues to be studied. It was injected upon the cortex of the cerebrum, spinal cord and into the sciatic nerves. These investigations brought to light two main points which can be conveniently summed up under two headings as follows:

1. *General Characters.*—Diphtherine brought into direct contact with nervous tissues produces at the point of application lesions of an inflammatory and degenerative order whether the animals had been previously immunized for diphtheria or not. This fact demonstrates the susceptibility of the nervous system to the specific poison of diphtheria. Furthermore these experiments showed that animals which were not previously immunized for diphtheria presented lesions which were more grave, more extensive and more penetrating also violent local reactions combined with phenomena of general intoxication. In all the animals it was determined that the toxin possessed considerable powers of diffusion and penetration. Brought in contact with the cord it penetrates its entire thickness and throughout all its length; it attacks even distant organs from the point of application, for example, the peripheral nerves, bulb, cerebellum,

etc. Injected into the sciatic nerve it reaches the cord and finally the sciatic of the opposite side. It determines lesions wherever it touches and death supervenes when the toxin reaches the bulbar centres; this occurs sooner when the toxin is applied to the cord, and less rapidly when brought into contact with the cerebral cortex.

2. *Histologic lesions*.—The histologic elements affected are, par excellence, the fibres, and whether the nerve-fibres or the white-matter of the cord lesions remain essentially the same. These changes accord with those described by Vassale in a number of infections and other intoxications. The axis-cylinders are not destroyed, although very markedly swollen; and the myelin substance is profoundly altered. It is much reduced in quantity, frequently liquified and sometimes completely disappears. Such changes correspond to those of a periaxial neuritis. In the cord the primary lesion attacks systematically, the crossed pyramidal tracts and the posterior columns in preference.

The importance of these determinations in the pathogenesis of post-diphtheritic paralyses is pointed out and the fact that the prognosis is good in the paralysis of this disease receives explanation in the preservation of the vital integrity of the axis-cylinders even in the most grave cases.

The Bacteriology of the Simple Posterior Basic Meningitis in Infants.—DR. G. F. STILL, in an article in the (*Journal of Pathology and Bacteriology for May, 1898*) gives the results of his investigations in this class of cases. These are summed up in his own conclusions:

1. The disease of infancy recently described as simple or non-tuberculous posterior basic meningitis, is a specific disease due always and only to a particular micro-organism.

2. The micro-organism which is the cause of this disease is a diplococcus, which is almost identical with the diplococcus described by Weichselbaum and Jaeger; it presents, however, some slight differences, which are probably to be accounted for by natural variation.

3. The simple posterior basic meningitis of infants must, on bacteriologic evidence, be considered as a sporadic form of the disease known as epidemic cerebro-spinal meningitis, the diplococcus intracellularis having been shown by recent observers to be the cause of some, at least, of the epidemics of that disease.

4. The peri-arthritis, which occasionally complicates the simple posterior basic meningitis of infants, is due to the same diplococcus that is found in the meningeal exudate.

On the Passage of Diphtheria Bacilli in the Urine.—BY FRED'K SMITH (*Lancet*, Nov. 19, 1898)—In the course of an experimental study in which guinea pigs were inoculated with live broth cultures of diphtheria bacilli Smith noticed that one of the animals was voiding hæmorrhagic urine. The animal was sacrificed and from the bladder diphtheria bacilli were isolated. Another pig was similarly inoculated and killed five hours later. Cultures taken from the urine similarly contained the diphtheria

bacillus. These results the author points out suggest that in haemorrhagic diphtheria at least, the bacilli may be found in the urine and it is predicted that in order to prove the presence of the bacillus in the blood investigators will hereafter search for it in the urine. This observation is of importance from the point of view of public health and suggests the advisability of thorough disinfection of the urine.

The Favorable Influence Which Heating Anti-diphtheritic Serum Has Upon the Occurrence of Accidents Due to Serum.—In the October number of the *Annales de l' Institute Pasteur* Spronck gives some interesting information on this subject. He refers to the unpleasant symptoms that sometimes occur after the injection of serum in the form of skin eruptions and at times even of polyarthritis, and mentions the fact that Beclerc, Chambon, and Menard had noticed in experimental work that heating the serum for an hour at C 58 caused a disappearance of these symptoms. Spronck tried the effect of heating all the serum supplied by his laboratory to the hospitals in Utrecht and gives the results which this had in reducing the serum accidents. He found that these accidents diminished very appreciably when heated serum was used, and in one instance began to return again on a return to the unheated serum. In 1895 and 1896 unheated serum was used in the two principal hospitals treating diphtheria, and serum accidents occurred in 21 per cent. of the cases; in the same hospitals in 1897 about two-thirds of the serum was heated, and only 5.4 per cent. of serum accidents occurred. The author recommends the heating procedure on account of these observations, and also on account of the fact that the heating affects very slightly the strength of the serum.

On the Diagnosis of Tuberculous Effusions.—P. COURMONT in a recent article (*La Semaine Medicele*, August 10, 1898) speaks of the difficulties commonly experienced in the diagnosis of tuberculous effusions of diverse nature. This has led him to study the possibilities of the application of the agglutination test in this class of cases, and to ascertain to what extent the specificity of this bacterial clumping could be reliable. The reaction was tried with dilutions varying from 1 to 5 to 1 to 20. When the dilutions were lower than one to five it was found that a positive reaction was not infrequently obtained with effusions of known non-tubercular nature.

The value of the test was demonstrated in the diagnosis of 11 cases of tuberculous pleuritis, so diagnosed from a clinical standpoint. In ten of these the reaction was positive and subsequent evolution of the disease confirmed the correctness of the bacteriologic diagnosis. The remaining case which gave a negative result with the agglutination test, showed no tubercle bacilli in the sputum and a portion of the exudate injected into a guinea pig failed to produce an experimental tuberculosis. With the effusions from nine cases of pleuritis clinically not tuberculous, the test proved positive in four instances and negative in the remaining five. The tubercular character of the four positive cases received verification by subsequent post mortem investigations. The application of the diag-

nostic agglutination test to 13 cases of ascites supposedly not of a tuberculous nature resulted in a positive reaction in five instances and negative reactions in the remaining eight. The latter cases were later shown to depend upon cirrhosis of the liver. In a similar manner 8 cases of joint tuberculosis were tested with a positive result in each instance.

The Ætiology of Syphilis.—VAN NIESSEN reports the results of experimental researches in the *St. Petersburg med Woch. No. 43, Oct. 24, 1898*. In previous experiments the blood of syphilitics was used, but was found to have certain peculiarities, such as greater or less immunizing power, and a bactericidal action, so that for the present investigations the author used the bone marrow from the bodies of children who had died with hereditary syphilis. It was found that the bacillus resulting from cultures originating in this way appeared very similar to the bacillus described by Lustgarten, and under certain conditions assumed the differential staining described by him. And, furthermore, if a drop of a pure bouillon culture of this bacillus were mixed with the fresh serum of a florid gummatous syphilide, there took place a very distinct agglutination which failed with the use of any other species of bacteria, as, for instance, the glanders bacillus, and on the other hand, did not occur upon the intermingling of the syphilis bacilli and the serum from healthy animals. Injections of the suspected species were then made under the prepuce or the cutis of guinea pigs. There then developed a slow and hard infiltration, with indurated lymphatics in the vicinity, and characteristic pustules with vascular injection. The pustules did not proceed to ulceration, but slowly shrivelled and dried. The author then describes various secondary manifestations, cutaneous and general, which appeared afterward, and also gives the results of similar experiments upon swine and apes.

He deduces the following conclusions from his experiments upon three guinea pigs, one pig, and four apes:

1. *Clinically.*—Primary affection; after several weeks' incubation, a multiform exanthem on both integument and mucous membranes with simultaneous polyganglionic, indolent glandular swellings; after a still longer interval, (in one case, simultaneously, in another even before the cutaneous manifestations) diseases of the nervous system similar to those occurring in man (hemiplegia, amaurosis, paraplegia).

2. *Pathologico-anatomically.*—After death in two apes, fatty liver, beginning nephritis, arteritis and ischæmia—further, endocarditis and leptomeningitis. Finally, lymphadenitis universalis, gummata of the skin, pachymeningitis and multiple hemorrhages into the spinal cord.

Additionally, as farther criteria, the author mentions, (1) the positive failure under certain conditions of the Lustgarten staining method; and, (2) the unfailing agglutinative effect of the specific serum upon the bacilli.

The Presence of the Bacillus Typhosus in the Gall Bladder Seven Years After Typhoid Fever.—By G. BROWN MILLER. (*Bull. Johns Hopkin's Hospital, May, 1898.*) The author reports the following interesting and very unusual case of a patient brought under observation suffering with

symptoms of cholelithiasis. The patient was a female 37 years old, who gave a past history of typhoid fever, dating back seven years. An operation was performed for the removal of the gall stones and a culture taken from the biliary viscus at this time contained an organism behaving biologically like the bacillus of typhoid fever. The Widal reaction was positive with her own blood and the typhoid bacillus isolated from her gall bladder gave a positive reaction with the serum of typhoid fever patients.

Typhoidal Cholecystitis and Cholelithiasis.—DR. HARVEY W. CUSHING. (*Bull. Johns Hopkin's Hosptal*, May, 1898.) In reviewing the literature of gall bladder infections with the bacillus of typhoid fever, finds that cases of primary typhoidal cholecystitis associated with stones are very rare. The writer has been able to collect but four such instances and adds to these a case of his own. The patient was a woman, 26 years of age, brought to the hospital suffering with symptoms suggestive of gall stones; there was no past history of typhoid fever. The patient was operated upon and cultures taken from the gall bladder at this time contained a pure growth of an organism morphologically and culturally similar to the bacillus typhosus. This organism tested with the serum of patients suffering from typhoid fever gave a positive reaction as well as to that of her own.

Infection with the Bacillus Pyocyaneus.—DR. DAN. N. EISENDRATH, in the November number of *Medicine*, 1898, reports the following case of pyocyanic peritonitis: Female, 24 years of age, came under observation suffering from peritonitis. Five months before admission she was taken ill with chills, nausea and vomiting. These chills recurred at irregular intervals, accompanied by considerable pain in the pelvis. At the time of observation she had diarrhoea, an extensive eruption over the back and limbs. Abdominal section showed the evidences of a marked purulent peritonitis; the cultures from the peritoneal cavity contained a pure growth of the bacillus pyocyaneus.

On the Presence of the Saccharomyces Albicans in the Bladder.—By PROF. A. V. FRISCH, (*Wien. klin. Woch.* 39, 1898.) The author reports the case of a woman, 64 years old, who was brought to the hospital complaining of the symptoms of acute cystitis from which she had been suffering for eight days. There was absolutely no past history of vesical inflammation. The introduction of the catheter permitted the escape of a quantity of gas. Cystoscopic examination of the bladder showed the deposition in different places on the mucons membrane of a white membrane and especially marked in the neighborhood of the ureteral orifices. Portions of the membrane examined microscopically showed it to contain the saccharomyces albicans; very few pus cells could be found in the urine. After four weeks treatment with 1-1,000 nitrate of silver irrigations the case ended in recovery.

Early Diagnosis in Whooping Cough.—H. L. WAGNER, in the (*New York Medical Journal*, Oct. 8, 1898.) mentions the importance of an early diagnosis in whooping cough, as in many cases its duration can be shortened and its spreading prevented by using proper early prophylactic measures. This is of particular interest to the Rhinologist, who may be

first consulted for the obstinate acute serous rhinitis, or later for the severe cough, and for the ophthalmologist for the concomitant hyperaesthetic conjunctivitis. The diagnosis, the author states, can be made at once by a bacteriological examination of the nasal secretions (primary place of infection). While in the secretions of the normal mucous membranes of the nose there are very few bacteria, in whooping cough a large mass of bacteria of one kind are found, a natural pure culture of "Polbacteria" (Czaplewski and Hensel). This pertussis bacterium when full grown is 2 or 3 times as long as broad, rounded and somewhat thickened at its ends and is divided in the middle; its morphological properties have been studied by several authors not very successfully, as they have had to encounter the difficulties of not only isolating this one bacterium from a large number of others, which are found in the secretion of the pharynx and lower respiratory organs, but also in observing somewhat different forms of this bacterium when using different methods of staining. This may be due to chemical reactions of the protoplasm of the capsule which surrounds the whooping cough bacillus. The author gives the Czapleksi method of staining this organism, which consisted (a) in the action of acetic acid solution, one per cent. and (b) by staining with a heated ten per cent. carbolic acid-glycerin-fuchine solution.

The author lately has been using with excellent results, the Knaaks' contrast stain, which he has somewhat modified, enabling him to examine the entire field quickly. The bacteria are stained blue and the cells and their nuclei, red. His method consists in staining with methylene blue and a weak alkaline solution; as contrast stain a very diluted fuchsine solution can be used, (one part concentrated alcoholic solution to 40 parts of water).

In conclusion the author mentions the case of Czaplewski, who was taken ill with whooping cough while studying the disease. The examination of his nasal and pharyngeal secretions showed the same bacillus that he was studying, verifying this as the cause of the disease. The treatment should certainly be principally a local one.

LARYNGOLOGY AND RHINOLOGY

Edited by C. F. Theisen, M. D.

The Etiology of the So-Called Chorditis Vocalis Inferior Hypertrophica.—(A. Baurowics's Report in *Internat. Centralbl.*, November, 1898.) Report of a case of a girl twelve years old, in whom there was severe subchordal hypertrophy. Tracheotomy was performed and the larynx dilated. The patient remained well for seven years, and then a membrane formed which brought together the free edges of the cords anteriorly. This membrane was cut through and the larynx again dilated. Seven years afterwards, the patient was again seen and then a slight thickening in the left subchordal space was found, with also a nodular swelling on the anterior portion of the right inferior turbinate. This infiltration was removed by the author, and it was now determined, by inoculation and examination of sections, that the disease was of a scleromatous nature.

Caries of the Sphenoid.—Schech, in *Münchener med. Wochenschr.*, No. 27, 1898, reports three cases. The first was that of a young woman, aged twenty, who had had an operation for the removal of a large polypus in the naso-pharynx. After the operation, the sphenoidal sinus was washed out. Oculomotor paralysis was at once noticed after this, and later the patient became blind. The autopsy revealed the presence of a gliosarcoma, with almost complete destruction of the sphenoid. The two other cases occurred in syphilitics. In the one case, there had been an apoplectic seizure, the other had repeated attacks of unconsciousness and vomiting. They both got well after proper general and local treatment. The author, in conclusion, makes the statement that great care should be taken in treating locally a carious sphenoid.

Further Contributions to the Serum Therapy of Diphtheria.—Baginsky (*Arch. für Kinderheilk.*, No. 24, 1898). From the 15th of March, 1895, there were treated in the Child's Hospital, Berlin, up to the end of that year, 396 cases of diphtheria, with 39 deaths; in 1896, 284 cases, with 24 deaths, and in 1897, up to the end of June, 119 cases, with 11 deaths: a mortality of 10 per cent. In 258 cases, there was well-marked laryngeal stenosis, 22 of which were of a catarrhal and 236 of a croupous nature; 113 got well with serum treatment alone; in 94, intubation was performed; 4 got well after tracheotomy, and in 7, secondary tracheotomy was performed. There was only a mortality of 15.5 per cent, or 40 deaths.

A Contribution to the Pathology of the Ductus Lingualis.—J. Killian, in the *Münchener med. Wochenschrift* for Sept. 6, 1898, reports four cases in which alterations in this duct were present which led to the presence of subjective sensations. All the cases were adult men, between nineteen and forty-five, and complained of trouble in the throat. Two complained of pain and smarting, and two of a feeling of a foreign body in the throat; one of the latter thought that he had swallowed a foreign body with his food, and that it had stuck in his throat. In two cases, the author's attention was first attracted by the presence on the base of the tongue, around the foramen cœcum and over it, of a localized patch of glistening mucus. In two cases a half-moon shaped swelling was present at the base of the tongue just in front of the insertion of the glosso-epiglottic ligament. Pressure on the swelling in each instance caused to exude from the foramen cœcum a milky fluid mixed with whitish grumous substance. Microscopic examination of this showed it to contain fatty cells, and also ciliated epithelium. In one case, where no swelling was present, a sound was passed into the lingual duct, and the patient recovered on the recovery of a pharyngitis, which was also present. In the other case where no swelling was present pressure behind the foramen cœcum caused fluid to exude. The author points out that the foramen cœcum is often absent, but when present often communicates with a canal of greater or less length; this canal is at times dilated at the blind end, is lined with ciliated epithelium, and may contain secreting glands in its walls; that these observations have a practical bearing, and thinks that

some of the cases of severe inflammation at the root of the tongue, of obscure origin, may begin as inflammations of this duct.

Direct Bronchoscopy. — G. Killian (*Münchener med. Wochenschr.*, No. 27, 1898). The author speaks first of the indirect method of examining the trachea, *i. e.*, with the ordinary laryngeal mirror. With this method it is rarely possible to see farther down than the tracheal bifurcation. It is possible to see much further when tubes are inserted through a tracheal opening. The author made experiments with inferior bronchoscopy by carrying a tube speculum down to the right bronchus, and illuminated by means of Casper's electric handle. He not only saw the descending bronchial branch for the right upper lobe, but also the division for the middle and lower lobes. Then, when the speculum was turned strongly to the right, it was possible to carry it into the left bronchus. It was finally possible, after cocainizing the larynx and air passages with a 20 per cent solution of cocaine, to insert the tubes by way of the mouth.

Report of a Death Following Immediately an Operation for Nasopharyngeal Adenoids under Chloroform, with remarks on Chloroform Anæsthesia in this Operation. — Hinkel, in *N. Y. Med. Journal*, Oct. 29, 1898, reports the case of a boy six years old, who had recurring earache and deafness since his second year. He was not a mouth breather and had not the usual facial expression. The anæsthetic was administered by a physician who had made a study of children's diseases and frequently gave chloroform. It was administered very carefully, a few drops at a time. A very slight systolic murmur was heard, loudest at the base, with apex beat in normal position. This, in view of the normal size and position of the heart, was regarded as probably not due to an organic lesion, as the murmur is not uncommon in debilitated children. The administration of the chloroform was interrupted by slight vomiting and spasm of the glottis, so that some time elapsed before the patient was sufficiently relaxed for the operation. About an ounce of chloroform was used in all. Pulse and respiration had been carefully watched, and when the chloroform was taken away, immediately before the operation, both were perfectly good. The operation was completed, when suddenly the boy gave a few shallow gasps and stopped breathing. Artificial respiration was continued steadily for two hours, hypodermics of digitalis, strychnine, ether and atropine were given, sphincters were dilated, hot-water injections and cold affusions were used, but without avail. A post-mortem was not obtained. The author quotes Dr. W. G. Halloway, Registrar of the Central London Throat and Ear Hospital, who tabulated fourteen deaths under chloroform in nose and throat operations, that had been reported in England up to April, 1895. Of these, eleven were in operations on the tonsils and nasopharyngeal adenoids reported since 1892. Hinkel has made careful inquiries of a number of throat surgeons in this country and abroad, and including his own case, is able to record eighteen cases of death following the administration of chloroform for the removal of nasopharyngeal adenoids, enlarged tonsils, or both. He also verified almost all of Halloway's references. In four of these eighteen cases,

death occurred before the operation was begun. In three, from a few minutes to an hour after the operation was completed. The observations of Paltauf and Kolisko are also quoted. Their investigations, made post-mortem on a number of cases of sudden death from slight causes, showed that there was present hypertrophy of the lymphoid tissues throughout the body, including the tonsils, lymphoid structure at the root of the tongue, and nasopharyngeal adenoids. Thymus gland was persistent and often very large, and the intestinal follicles were markedly hypertrophied. A dilated heart was frequently present not dependent on valvular lesions, and at times there was a narrowing of the aorta, with small size of the peripheral vessels. This condition, known as *habitus lymphaticus*, was found, among others, in a number of cases of death during chloroform administrations. Paltauf also reported a number of deaths under anæsthesia, where the thymus and other lymphoid structures were found enlarged. He concludes that a result of this condition is a marked vulnerability of the individual, and a particular predisposition to cardiac syncope. The author concludes with the statement that ether is a much safer anæsthetic than chloroform, as but one death is reported from its use in the operations under consideration, and that no deaths had been reported from nitrous oxide or ethyl bromide. He submits the following affirmations:

1. Statistics show an exceptionally high mortality from chloroform anæsthesia in the operation for the removal of lymphoid hypertrophies of the pharynx.
2. The observations of the Vienna pathologists show that sufferers from "adenoids" frequently belong to an abnormal constitutional type that has been found peculiarly susceptible to chloroform narcosis.
3. In view of the statistical and pathological data presented, the general use of chloroform in the operation for hypertrophied tonsils or nasopharyngeal adenoids, is inadmissible.

The Position of the Vocal Cords after Recurrens and Posticus Resection. Klemperer, in *Münch med. Wochenschr.*, No. 28. 1898, has been able to determine, by new experiments, that when the *recurrens* nerve is cut through, cadaveric position of the cords always results. Occasionally a median position of the cords is noticed, but only when in making the resection the nerve is irritated or is not cut through at once. This median position is only transient, and the cords soon assume permanently the cadaveric position. A double-sided paralysis of the recurrent laryngeal causes stenosis in young and small animals with narrow larynges. If the posticus alone is cut through, almost a complete median position of the cord results. There are still some movements of the cord, but these are brought about by the adductors and the crico-thyroid. The true width of the glottis after a bilateral resection of the *recurrens* is really only exhibited after tracheotomy. A bilateral posticus resection causes a great narrowing of the glottis, which is also seen in people who have a bilateral posticus paralysis. If a resection of the superior laryngeal is made, and after it the *recurrens* cut through, the glottis will be

a little wider anteriorly, but posteriorly the width of the glottis will not be changed.

A Case of Epithelioma of the Pharynx.—C. E. Shaw, in the *Journal of Laryngology, Rhinology and Otology*, September, 1898, reports a case of this kind. The patient was a woman between thirty-six and thirty-eight years of age, and at the time of examination was more than six months pregnant. On examining the pharynx, the author discovered a swelling, about the size of a nut, on the posterior pharyngeal wall directly behind the epiglottis, which it touched. There were no enlarged glands. A piece of the growth was removed, and when examined was found to be an epithelioma. The patient had several free hemorrhages from the throat, the first coming on five days after the piece of the growth was removed. Patient was delivered of a child, which lived three days, at about the regular time, and a week later, she became comatose and died in a few hours. The author, in conclusion, considered the rarity of malignant growths in the pharynx, and stated that he had not been able to find any record of a malignant tumor on the posterior wall. In this case, an interesting feature was the absence of pain. Operative interference was out of the question, owing to the size and position of the growth.

Bleeding Polyp of the Septum (Telangiectoma.)—George L. Richards, in the *Laryngoscope*, December, 1898, reports a case of this rather rare affection. The patient, an adult male, had had hemorrhages from the right nostril for eight months. There was present on the cartilaginous septum, a reddish-blue mass about five-eighths by one-quarter of an inch in size, freely movable. After its removal with a cold wire snare, there was profuse bleeding from an area hardly larger than the head of a pin. This was checked after the galvano-cautery was used, and the anterior portion of the nostril packed with gauze strips soaked alternately in peroxide of hydrogen and an antiseptic oil. Microscopic examination showed the tumor to be a cavernous angioma, with but little interstitial substance. This substance was connective tissue of the round-celled variety, in most places, yet in places was cylindrical. The blood spaces were filled with corpuscles and were of every size, from very small to very large; the majority of these spaces were lined with very thin endothelium and very irregular in shape. The author concluded that the term telangiectoma is a better name to give to this tumor than simple angioma, because it is not a dilation of capillary vessels which normally exist in the locality, but a true extension of them outward, forming a new growth (an ectasis).

A Contribution to Glossitis Papillaris and Tuberculosa.—Stetter, in the *Arch. für klin. Chirurgie*, 56 bd., 2 heft., 1898, reports the cases of three women and one man in all of whom there was present hypertrophy of the papillæ circumvallatæ, back of the tongue, which caused a prickling and burning sensation in the throat, with a continual desire to cough. The hypertrophied papillæ were excised. The histological examination indi

cated that the condition in all cases was one of hard papilloma. In another case, that of a man forty-five years old, there was also present this condition of wart-like hypertrophy, particularly at the tip of the V forming the papillæ circumvallatæ. It was a tumor about the size of a pea, covered with apparently normal mucous membrane. When the growth was examined, tubercle bacilli were found. The author concludes that in this case, the infection of the tongue was secondary, because in a comparatively short time, the pulmonary tuberculosis could be made out.

The Treatment of Sinusitis.—Moure, in *Revue Hebd. de Laryngol.*, March, 1898, gives the following forms:

1. Mucous or muco-purulent discharge without complications.
2. A chronic suppurative form with the formation of fungous neoplasms.
3. A fistulous form with abscess and bony lesions.

In affections of the frontal sinus, the author gives the same method of treatment as for the mild cases of ethmoiditis, *i. e.*, the proper treatment of the Schneiderian membrane in general. In the fungous forms of ethmoiditis, the neoplasm should be removed and the ethmoid cells freely opened into and cleansed. In the fistular form of ethmoiditis, the diseased area should be completely removed. In the suppurative forms of frontal sinusitis, antiseptic washes are frequently sufficient. The developed cases require external opening, with drainage through into the nose; the drainage tube may be removed after five or six days. In the fistular form of frontal sinusitis, the same treatment should be applied. The mucous form of sphenoidal sinusitis is often mistaken for ordinary nasopharyngeal catarrh. Opening into the sphenoidal sinus is sometimes necessary, and is best done, after removing the middle turbinate, by perforating the anterior wall of the same.

Eucaïne Hydrochlorate "B" as a Local Anæsthetic in the Nose.—L. S. Somers, in the *Therapeutic Gazette*, Sept. 15, 1898, comes to the following conclusions:

1. Eucaïne hydrochlorate "B," in three per cent solution, produces as complete anæsthesia of the nasal mucous membrane as does a four per cent solution of cocaine.
2. Its action is slower than cocaine.
3. The anæsthesia is dissipated more rapidly than that produced by cocaine.
4. It is non-toxic in the strength and manner used.
5. As it has no apparent shrinking action on the turbinal investiture, as has cocaine, it is therefore less valuable for nasal surgery than cocaine.
6. It is superior to the former variety of eucaïne, because its toxic properties are less, it is more rapid in action, is non-irritating and the same degree of anæsthesia may be produced by smaller amounts of the drug.

Practical Therapeutics

Seborrhœa Capitis.—

℞ Tinct. canthar,	35
Tinct. cinchonæ,	40
Tinct. benzoin,	15
Spir. lavand.,	30
Ol. ricini,	5
Alcohol,	200

M.—*American Medical and Surgical Journal.*

Neuralgia.—

℞ Ichthyol,	
Ung. hydrargyri,	āā 2.5
Chloroformi,	
Spir. camphor,	āā 15

M. Sig.: Shake well before applying.—*Eulenberg.*

Atonic Dyspepsia.—

℞ Sodii bicarb.,	gr xv
Tinct. nuc. vom.,	m xv
Tinct. calumbæ,	3 ss
Spir. ammon. arom.,	3 ss
Inf. aurant. comp.,	ad 3 i

M. f. haust.: To be taken three times daily, half an hour or an hour before food — *Yeo.*

Acute Inflammations of the Throat.—

℞ Eucain.,	gr X
Cocain. hydrochlor.,	gr X
Aquæ distillat.,	3 vj

M Sig.: Use as a spray.—*The Practitioner.*

Chronic Cystitis. —In some obstinate cases of cystitis, the following injection has given brilliant results:

℞ Guaiacol,	4 5
Iodoform,	3.75
Ol. olivæ steril.,	90.

M. Sig.: An injection into the bladder.

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ALBANY MEDICAL ANNALS

Original Communications

THE PROBLEM OF TYPHOID FEVER IN THE UNITED STATES.*

By WILLIAM OSLER, M. D.,

Professor of Medicine, Johns Hopkins University.

What I am about to say on the subject of typhoid fever may appear to many of you trite and stale; and so indeed it is, but under the circumstances the very staleness is a warrant for repetition, the triteness makes earnest reiteration a necessity. Nor do I forget that only two years ago a most interesting discussion on typhoid fever was held under the auspices of this Society, a discussion which brought out many important practical points. Since then the country has had a very bitter lesson — not a more bitter one than it has had year by year as each autumn recurs, but the method of application, coming as a sad conclusion to a brilliant victory, aroused a degree of public feeling which may be taken as an augury of hope.

I.

For three generations the physicians of the country have been studying the problems of the continued autumnal fever. No other disease has possessed such a perennial interest; of no other acute disease can we read so full a history from American sources

* Address in Medicine delivered before the Medical Society of the State of New York, February 1, 1899.

alone. With no other disease are associated the names of men still honored as our great leaders. The physicians of the first generation, to 1830, lived in a period of transition, when old theoretic conceptions were giving way to proper methods of observation. It is particularly interesting to see typhoid fever as depicted by one of the best of them, by one who in thirty-five years practised medicine extensively in every New England State but Rhode Island. I re-read at intervals Nathan Smith's *Practical Essay on Typhous Fever*, published in 1824, each time with increasing respect for his sagacity. There is more strong, sane sense in his booklet of eighty-five pages than in anything that had appeared on "the slow nervous fever" since Huxham. It is most refreshing to turn from contemporary treatises on fever in English, French and German to this clinical masterpiece. Happy the patients who fell into the hands of the old founder of Dartmouth Medical School and the first Professor of Medicine at Yale! With but little modification his section on treatment might be transferred to one of our year books as the freshest and the best.

The men of the second generation did notable work in bringing new methods of observation, and in clearly outlining the differences between typhus and typhoid fever. They came to the problem splendidly equipped, inspired by their great teacher, Louis, whose practical mind appealed with peculiar force to the young Americans who studied with him between 1828 and 1845. Among them Elisha Bartlett, James Jackson, Jr., W. W. Gerhard, George C. Shattuck and Alfred Stillé were chiefly instrumental in promoting in this country the study of fever. To appreciate their position one has but to read W. W. Gerhard's masterly contributions, and Bartlett on Typhus and Typhoid Fevers, the first edition of which was published in 1842—a treatise which might be put into the hands of a student to-day for the main features of the morbid anatomy and symptoms of these diseases. The contrast between the modern stand taken at that date by leaders of medical thought in this country and in Europe, particularly in England, is shown by the fact that Sir William Jenner, recently dead, had to attack the problem anew in 1849-50, before English physicians could be convinced of the essential distinctions between typhoid and typhus fever. In acknowledging the work of others he particularly mentions the names of Gerhard, Shattuck and Bartlett, as men who had already done

what he was about to attempt. And I should like to remind you that one of the best contributions to the subject, Austin Flint's *Clinical Reports on Continued Fever*, was the outcome of a committee appointed by this society nearly fifty years ago.

I shall not allude to the labors of the men of our own generation. The care and zeal with which typhoid fever has been studied during the past thirty years by the physicians of this country has been beyond all praise. I wish to emphasize as strongly as it is possible to do in words that we, as a profession, have been persistently alive to its importance. This I feel is necessary to affirm, as I have heard the suggestion from a lay quarter that perhaps if we had studied the disease more thoroughly there would be less of it in the country.

II.

To bring into stronger relief the contrast which I wish to draw, bear with me for a few minutes while I review a few familiar points. One of the great facts in the history of the past half century has been the remarkable increase in our knowledge of the infectious diseases. In any general survey of this group there is perhaps no single member of it upon which we physicians can dwell with greater pride and satisfaction than upon typhoid fever. In every relation the growth of our knowledge has been extraordinary. The etiology has been so worked out as to justify the hope that the remaining gaps will soon be filled. Think for a moment of the laboratory work of the past twenty-five years! Our position to-day is the result of the combined labors of thousands of workers in Europe and in this country — labors carried out with a devotion and zeal for which we general practitioners (I say nothing of the public) are not always properly appreciative.

I need not dwell upon any special points in the morbid anatomy, or indeed upon the symptomatology, in both of which we have progressed chiefly in a very much wider recognition of the clinical and anatomical features of the disease.

The diagnosis has been simplified, partly by the accurate differentiation of it from typhus fever (which has almost totally disappeared), partly by the discovery of the parasite of malarial fever, but still more by the grouping of well recognized symptoms,

and by certain special methods for the detection of the bacilli or of the reaction of their products.

And most important of all for the individual patient, our enlightenment on the question of treatment has been full, I will not say conclusive, in all directions. Nursing and diet are universally recognized as the most essential elements, and we have abandoned, in great part at least, the active measures of our grandfathers, bleeding, vomiting and purging. The death rate has been lowered eight or ten per cent. It is not an easy matter, however, to get the average physician out of the drug habit in typhoid fever. The words of that wise old man, Nathan Smith, should still carry weight: "It does not follow, of course, that the disease in all cases requires remedies, or that a patient should necessarily take medicines because he has the disease."

But these advances, as we call them, sink into insignificance before the triumphs of sanitation in the prevention of the disease. Sixty years of sanitary reform have swept away typhus and cholera, and have restricted yellow fever within narrow areas; we have learned how to fight tuberculosis and diphtheria, and in a hundred other ways the prevalence of the infectious disorders has been lessened. One demonstration stands out in clear relief above all others — *with a clean soil and pure water typhoid fever disappears*. In cities which stood at the head of the list in mortality from the disease, as Munich and Vienna, the death-rate has dropped to the lowest known percentage after the introduction of drainage and a good water supply. The object lesson of some of the continental cities has been paralleled in a few, but far too few, of the cities of this country. Figures in illustration and black diagrams have done duty at our societies, until many of the members squirm at the very name of Munich. That imperfect drainage and a polluted water supply mean a high mortality rate from typhoid fever is the very alphabet of sanitary science. In scores of instances carelessness in one or other of these points has led to widespread epidemics; incessant vigilance is universally recognized as the price of safety. I need not dwell further upon this aspect of the question, but I repeat, Mr. President, that we can point with justifiable pride to typhoid fever as the best understood, the most carefully studied of the acute infections, the one most directly under our control, the one in which the greatest victories of hygiene have been won.

III.

Let us turn from this picture with its glowing colors to a more sombre canvas. Last autumn this nation, in the moment of victory, had a rude awakening, a sudden conviction, a hard lesson. A voice like that heard in Ramah went up throughout the land — “lamentation and weeping and great mourning.” From Montauk Point to San Francisco, from Minneapolis to Tampa, Rachels were weeping for their lads, cut off by a cruel disease. The most bloodless campaign in history was followed by a relatively greater mortality from disease than in any recent war, and chiefly from this very disease over which I have been chanting the peans of the triumph of our profession. To us these autumnal dirges rang no new tune; we had heard the same in the palace of the rich, in the crowded tenement, in the hospital ward, in peaceful New England valleys, in the settler’s shanty of the far West, in the lumberman’s shack, in the mining camp. Year by year we had listened to the Rachels of this land weeping for their fair sons and fairer daughters, not killed by any pestilence that walked in darkness, but by a preventable sickness that destroyed in the noon-day — the noon-day of the intelligence of a civilized people. People asked each other, what did it all mean? Nothing more than a slight extension of the judgment upon criminal neglect of sanitary laws. The number of soldiers who died of typhoid fever during and after the war was a bagatelle in comparison with the total annual deaths from the disease in this typhoid-stricken country. Throughout the length and breadth of the land typhoid fever prevails so extensively in township and county, in village and city, that any large body of men aggregated together was almost certain to become infected.

This is a nation of contradictions and paradoxes. A clean people, by whom personal hygiene is carefully cultivated, displays in matters of public sanitation a carelessness which is simply criminal. A sensible people, among whom education is more widely diffused than in any other country in the world, supinely acquiesces in conditions shameful beyond expression. I do not propose to weary you with statistics, of which our journals and reports are full, but I will refer to a few facts drawn at random from three cities and three States, illustrating this shocking neglect.

Philadelphia, the most typical American city of the Union, pre-

sents to-day a state of appalling apathy. For years the diluted sewage of the Schuylkill Valley has furnished drink to its best citizens, who bathe for many days of the year in water resembling a thin pea-soup. Individually the Philadelphian seems to be — nay, he is — an intelligent being, who deplores sincerely this condition. Collectively such a community must be regarded as lacking in one of the most essential features of civilization. Last week (ending January 28) there were 40 deaths from typhoid fever in the city, and 427 cases reported! Last year it is estimated that there were between 5,000 and 6,000 cases of typhoid fever, 600+ of which were fatal. A writer in the Philadelphia Medical Journal last week estimates the annual money loss from this disease at a million and a half dollars.

In Baltimore we are a little better off, though typhoid fever prevails extensively, and more than two hundred people die of it annually. The city is unsewered, with 80,000 cess-pools, and has a water supply with unprotected sources. With proper sanitary measures the present death-rate of between 40 and 50 per 100,000 of the population should fall to 10 or 12.

The condition of the National Capital is an excellent sanitary index of the whole country, and illustrates, too, how persistently those in power neglect the repeated warnings of the medical profession. One might have supposed that in Washington, governed by a commission under direct control of the central government, and to a large extent free from the influence of politics, sanitary measures, which are everywhere recognized as essential, would be carried out. For years the Medical Society of the District of Columbia has agitated the subject, and committees have urged upon the commissioners certain much-needed reforms, particularly relating to the purification of the Potomac water, which is practically the only source of supply. A committee, of which Dr. George W. Johnston was chairman, reported recently that for the past seventeen years there has been an annual average of nearly 1,500 cases of typhoid fever.

Dr. Smart, of the Army, a leading expert in sanitation, expressed the plain truth when he said the other day that, *in the matter of the purification of the water supply of her large cities, the United States was a generation behind Europe.*

Serious as is this condition in so many of the large cities of

the Union, it is not, in reality, so dangerous as the widespread extension of the disease throughout the smaller towns and country districts. The last reports of three important States illustrate this. We gather from the Report of the Board of Health of the State of Indiana that of the ninety-two counties typhoid fever prevailed in all but ten, and from some of these there were no reports. A total of 655 persons died in the counties of the State from typhoid fever for the year ending September, 1897.

In your own State the last annual report issued (1897) gives the total number of deaths from typhoid fever as 1,585, to which must be added a very large proportion, at least, of the deaths recorded as due to the malarial fevers. If we allow, say, thirty-eight deaths from the various forms of malarial infection in New York State, which I put as a very large figure for the year, this brings the total mortality from typhoid fever to 2,000+. It is interesting to note, as bearing out what I said in connection with the wide extent of the disease in the country and smaller towns, that these districts of the State, with a percentage of city population under 50 per cent., have a relatively greater death-rate. The Maritime district, for example, with 90 per cent of city population, has a death-rate of only 16+ per 100,000 of population, while the Hudson Valley, with only 40 per cent of city population, has 37+, and the Mohawk Valley and Southern Tier, with 31 and 30 per cent. respectively, of city population, figure with 34 and 37+ deaths per 100,000 of population.

In the organized study of sanitation Michigan is one of the model States of the Union. Dr. Baker's reports upon the prevalence of typhoid fever are of particular interest. In his last, 1897, it is stated that there were in Michigan 642 separate outbreaks of the disease, with 774 deaths, a rate of 23+ per 100,000 living. There were only three counties from which the disease was not reported. It is gratifying, however, to note the gradual reduction of the death-rate from typhoid fever in this State during the twenty-nine years available for statistical data. While still far too high, the persistent efforts of the State Board of Health are gradually limiting the ravages of the disease.

IV.

Mr. President, the problem of typhoid fever, no longer in our hands, has become a question of grave public concern. Can we, as a profession, do more? From the text *Salus populi suprema est lex*, in season and out of season, we have preached sermons which fill huge volumes of State reports, and, as regards typhoid fever, we have preached in vain. Perhaps not wholly in vain, since in many cities, as in Boston, in many States, as in Massachusetts and Michigan, the incidence of the disease has lessened materially; but the existing conditions are proof that we have failed to bring conviction home to the minds of the people. An incidental advantage of the late war was the direction of public attention to the widespread prevalence of the disease, but it is doubtful if the lesson was bitter enough to enforce at once the teaching that matters of health come within the province of practical politics. It may seem a hard saying, but for the sake of prospective victims in the years to come, let us hope that the deaths from typhoid fever this year in Philadelphia may reach 1,000 and the number of cases 10,000. *Then* the citizens of that town will stop drinking sewage and will soon be able to wash in clean water. Great epidemics are the only great sanitary reformers, but, except in limited areas, typhoid fever rarely now assumes pandemic proportions. Quite as impressive, though more difficult to teach, is the lesson of its disappearance in large towns, previously hot-beds of infection, by attention to ordinary sanitary laws.

The solution of the problem is easy. What has been done in many parts of Europe can be done here; the practical conviction of the people is all that is necessary. Upon them is the responsibility. Let us meanwhile neither scold nor despair. The good-natured citizens who make up our clientèle, pay our bills and vote the straight party ticket, have but little appreciation of scientific questions, and are led as easily (more easily) by a Perkins or a Munyon than by a Lister or a Koch. Under the circumstances it is marvellous that so much has been achieved in fifty years. "The larger sympathy of man with man," which we physicians are called upon to exercise daily in our calling, demands that we continue our efforts — efforts often fruitless in results,

but very helpful to ourselves—to educate this foolish public. What is needed seems so easy of accomplishment—the gain would be so enormous! We ask so little—the corresponding benefits are so great! We only demand that the people of this country shall do what Elisha asked of Naaman the Syrian—that they shall wash and be clean—that they shall scour the soil on which they live, and cleanse the water which they drink.

The problem will be solved when, first, *every city in the Union has a supply of pure water (including ice), and is properly drained*; secondly, *when suburban and rural hygiene is systematically organized*. In many ways a city's danger is from the country. Infected milk, infected ice, infected oysters and dirty health resorts account for a considerable percentage of the cases treated in the towns. Many of the State Boards of Health need a more efficient organization; all need larger annual appropriations. A bureau of public health should form an integral department of each State government, with which civic, county, township, town and village boards should be in close organic affiliation. The salaries of the health officers should be changed from the beggarly pittance, almost the rule, to sums which would warrant a demand on the part of the public that such officials should have modern training in sanitary science. Special courses should be offered in the medical schools, as is done in England, and even diplomas given. All this will come when the health of the people is made a question of public, not of party, policy. It is encouraging to note that such States as, for example, Massachusetts and Michigan, in which the health boards have the most efficient organization, are those in which the death-rate from typhoid fever has been progressively diminishing.

The responsibility for the wide-spread prevalence of the disease rests directly upon the wanton carelessness of the people. God's own country, with man's own back-yards, and the devil's own cess-pools expresses the existing conditions. A three-fold duty devolves upon the members of our profession; first, to preach cleanliness! cleanliness!! cleanliness!!!; secondly, to give a loyal and willing support to the State health officials; and thirdly, to guard every case of typhoid fever as a centre and possible source of further infection.

Let us hope, Mr. President, that the lesson of last autumn has been taken to heart by the citizens of this land. Sometimes from our desolation only does a better life begin. Surely the blood penalty has been paid in full for the gross neglect of sanitary laws. The wantonness of the sacrifice is so terrible, so inhuman. Nature is inexorable, and red in tooth and claw with ravin, knows nothing of our humanitarian care of the individual. But her sacrifice is never wanton. Careful of the type, careless of the single life, sacrifice is a law of being, a condition of existence. In one of his delightful lectures on the *Foundations of Zoölogy* Professor Brooks tells us that of the countless millions of the king of fish which yearly enter the Columbia river seeking the breeding grounds, in the stern impulse of propagation, none return. "The whole race is wiped out, utterly exterminated, as soon as it arrives at maturity and physical perfection, in order that the perpetuation of the species may be assured." Our ways, thank God, are not Nature's. Indulge as we may in speculations on the improvement of the race, in practice we care nothing for the species, only for the individual. Reversing Nature's method, we are careless of the type, careful only of the single life. Year by year unwilling witnesses of an appalling sacrifice, as fruitless as it is astounding, year by year we physicians sit at the bedsides of thousands upon thousands, chiefly of youths and maids, whose lives are offered up on the altars of Ignorance and Neglect. Walking always in its shadow, compassed always by its sorrows, we learn to look on death with mingled feelings. There is the death that comes with friendly care to the aged, to the chronic invalid, or to the sufferer with some incurable malady. Very different, indeed, is it with typhoid fever. A keen sense of personal defeat in a closely contested battle, the heart-searching dread lest something had been left undone, the pitifulness of the loss, so needless—and as a rule "in the morn and liquid dew of youth"—the poignant grief of parents and friends, worn by the strain of anxious days and still more anxious nights—these make us feel a death from typhoid fever to be a Delian sacrifice.

For fifty years the profession has uttered its solemn protests, as I do this day; Mr. President, we have done more—we *have shown how the sacrifice may be avoided and the victims saved.*

THE RELATION OF PREVENTIVE MEDICINE TO
POLITICAL ECONOMY.*

BY HON. GEORGE W. BRUSH, M. D.,

Brooklyn, N. Y.

So much has been written in the last few years on the subject of prevention of tuberculosis and so many successful and practical demonstrations have been made of the efficacy of the application of the means which science has placed at our disposal that it seems superfluous to try to demonstrate that the State should adopt more active measures to stay the ravages of the disease. The fact remains, however, that the revolution, in the opinion of medical men, as to the causes and methods of prevention of this disease, have as yet received but little attention from our local or State legislative bodies.

In the brief time allotted to me, I shall try to show why the State should take more active measures to stay the ravages of this disease, which carries off more victims annually than small-pox, typhoid fever, scarlet fever, or any of the infectious or contagious diseases, or all of these combined. Until recently little has been done by the State, and the fatality of the disease has been accepted by the people as inevitable, as one of the visitations of Divine Providence from which there is no escape.

The highest duty of the State is to secure the welfare and happiness of its citizens. Governments are organized for the benefit of the people, and preservation of the health of the citizen is essential to prosperity. Disraeli said: "The public health is the foundation upon which reposes the happiness of the people and the power of the country." No truer words were ever spoken,—without health the productive power of the citizen is lost to the State, and from the producing power of its citizens it derives its chief source of wealth and influence.

The nations of the earth have been groping in darkness and doubt as to the cause of this dreadful scourge of the human race, and the patient researches of medical men have been unrewarded until the latter half of this century. A recent writer says: "It was vouchsafed to Robert Koch to bring order out of chaos, harmony from confusion, strength out of weakness, hope from despair. Upon the foundation laid by Sylvius and Willis, elabo-

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rated by Bayle, Laennec and Villemin, of the existence of tubercle, of its specific character and inoculability we knew, but Robert Koch raised the arch and gave it strength and perpetuity by keying and crowning the same with his own matchless discovery of the existence and pathogenesis of the tubercle bacilli."

Knowing the cause of the disease and its method of propagation as we do now, it would be a crime against the citizens of the State not to put forth every effort possible to prevent and stay its mortality. There are hopeful signs in the work which has already been done in this State, but it has not passed beyond the embryonic stage. One of the recognized methods by which tuberculosis is communicated to the human subject, is through the medium of infected meat and milk. This knowledge has led the New York State Board of Health to take steps for its suppression among the cattle of the State; acting under recent laws the tuberculin test has been made and diseased cattle destroyed, the owner of such cattle receiving a reasonable compensation therefor; but the small appropriations made by the State in the past have limited the thoroughness of these efforts.

While this work has been going on, little has been done directly to prevent the disease in the human race. We are just beginning to wake to the importance of this subject, however, for at the last session of the Legislature, a special committee of the Senate was appointed to examine into the question of establishing a State hospital in the Adirondack mountains for the treatment of tuberculosis. The writer had the honor of serving as chairman of that committee, which has just made its report, but the subject is so vast and the time at its disposal was so limited that it has only been able to scratch the surface, as it were. The committee, fully recognizing the importance of the subject, has made patient and as careful research as was possible. Their recommendations include the establishment of a State hospital or hospitals for the treatment of this disease and further researches.

This committee has also recommended a wide dissemination of instructive literature upon this subject by the State Board of Health, recognizing that much can be done by the individual citizen in the way of preventing the disease. Any physician knows the difficulty he has in getting hospital treatment for the tuberculous poor. It is an astonishing statement to make, but there are no public hospitals in this State for the special treatment

of a disease which carries off more of the people annually than any other known malady.

Ordinary hospitals do not want these cases, because of their known infectious character, and the tuberculous poor are left to die in the densely crowded tenement-house districts, where they infect those around them, during their months, and sometimes years of sickness. The Senate committee above referred to has urged upon their representatives the crying need of establishing local hospitals in the suburbs of our large cities and towns for this class of cases. The last annual report of the State Board of Health shows a list of 13,257 deaths from tuberculosis in New York State, the greatest mortality being in the densely-populated districts of the large cities. The last census report shows a death list from tuberculosis in the United States of 100,000, which at a low estimate involves a loss of \$100,000,000 a year. The latest statistical figures obtainable show an annual loss from tuberculosis in the German empire of about 94,000, and in England of about 75,000. The most of these cases die between the ages of 15 and 65, the most productive period of life. Time will not permit me to enter minutely into details in this paper but a very instructive lesson on this disease will be found in the study of the Report of the New York City Health Board of 1897. Of this report the Health Commissioner of the city of Denver says in a letter to the writer: "It is only fair to state to you that the members of the health boards all over the country regard the publication emanating from the New York board last year and this as being the most advanced and reliable statement possible. Citizens of New York have every reason to be proud of the work that has been accomplished by your board during the past decade." This is quoted in order that those who do not know of the existence of this report may obtain it, as it will repay careful perusal.

What is the duty of the State in view of the above facts?

There are three aspects that present themselves to the statesman: 1st. The purely humanitarian aspect. 2d. The duty of the State to protect the individual. 3d. The economic aspect.

In reality these three are so intertwined in their relations that it will be hardly worth while to consider them separately. There might be a question in the mind of some, if the subject related only to the humanitarian side, how far it is the duty of the State to

interfere. There certainly can be no question in the minds of any as to the duty of the State to protect the individual not only from the consequences of his own ignorance and wrong-doing but from that of others. This is demonstrated by the numerous laws on our statute books upon this subject. The large discretionary powers given to boards of health in the matter of the protection of the health of the community, the establishment of jails and reformatories, the maintenance of our police force in the various cities, and the National Guard throughout the State, is evidence of the recognition of this duty. The question of the loss to the State by reason of untimely death, or the loss of services by disease is one that would give large scope for the statistician, and fabulous sums might be figured out of losses to the State through this means. It is doubtful if in the past this phase of the question has received the consideration at the hands of political economists which it should. It is an accepted, though in many cases painful, fact that disease brings with it, in addition to the distress and hardship to the individual a financial loss to the whole family with which he is connected, and indirectly this loss in the end falls upon the State. The labor of every producer has a certain fixed average value annually to the State. Estimates of this value vary from \$780 to \$2,000. Chadwick considers an English laborer equivalent to a permanent deposit of \$980. Farr gives \$780 as the average value of each human life in England. If we take a conservative estimate of \$1,000 as the average value of each producer in this State, and then consider that 13,000 human lives are lost to the State of New York who are victims to tuberculous disease alone each year, we at once see that the State sustains an annual loss of \$13,000,000, enough to pay over half the expenses of State government. If we add to this list those who die from other infectious and contagious diseases such as typhoid fever, diphtheria, grippe, measles and small-pox, all of them to a large extent at least preventable diseases, controlled by proper sanitary regulations, we shall nearly double the above figures. This does not take into consideration the loss of time of the diseased person during the continuance of the sickness and the loss of the labor of those in the family attendant upon him.

Dr. Arthur R. Guerard, Assistant Bacteriologist of the New York Health Board, in considering this phase of the question

says: "According to the official reports of New York, London, Paris, Berlin and Vienna there has been a gradual but steady decline in the death-rates from tubercular diseases during the last ten or twelve years." This is attributed to the more active sanitary measures which have been taken by the departments of health in our large cities in this country and Europe and the wider dissemination of knowledge among the people by means of circulars giving instructions as to methods of disinfection and protection.

The same writer says: "The average annual deaths from tubercular diseases in New York city from 1884 to 1896, inclusive, were 6,072, or a total of 78,934 deaths from this cause in the twelve years. In 1896 there were 5,926 deaths from tubercular diseases, of which 770 or 253.7 deaths per thousand from all causes occurred between the ages of 15 and 65; that is, during the period of greatest productive power of the individual."

If we assume that all that is required to limit, if not practically stamp out, this disease, is the establishment of hospitals for the proper treatment of these cases, the enforcement of strict sanitary regulations, and last, but not least, a wide dissemination of knowledge among the people of the causes of the disease, and how it may be prevented, it certainly demands prompt action on the part of the Legislature of this State.

Attempts have been made by governments to stay the ravages of consumption for more than one hundred years, and it seems that its infectious or contagious character was believed in at an early day. In 1792 action was taken by the kingdom of Naples, where the disease had become epidemic, the death-rate reaching as high as 10 per 1,000, stringent laws were enacted to check the spread of the disease and making its report compulsory under penalty of \$684 for the first offense and, upon repetition, banishment for ten years. (I am afraid that if this stringent rule were applied now in New York State there would be a large exodus of medical men.) Clothes and chattels of infected persons were destroyed by fire, infected houses were thoroughly renovated, doors and windows replaced by new ones, the walls replastered and the sick poor removed to hospitals and isolated. Surely history repeats itself, though we shall not now find it necessary to adopt such drastic measures. The result of this course in Naples was a practical stamping out of this disease. It is a

significant as well as an encouraging fact, that wherever intelligent preventive measures have been adopted by the government either in this country or in Europe, the death-rate has rapidly decreased. In some parts of England there has been a falling off of fifty per cent of the deaths from tuberculosis. In this country similar results have been reached; while England and Germany have established public hospitals and sanatoria, only one State in these United States has a State hospital for the treatment of tuberculosis, and this has been established in the State of Massachusetts during the past year. Preventive measures for the limitation of consumption by the State are in their infancy in this country; if they are to go forward, much will depend upon the medical profession, whose highest and noblest function is the prevention, not the curing of disease. This society should by resolution urge upon the Legislature the necessity of establishing State hospitals for the consumptive poor or those in moderate circumstances, to whom the advantages of private institutions are impossible. It should also urge the necessity of disseminating knowledge among the people by means of circulars as to the causes of consumption and the means to be adopted for its prevention. The work of stamping out tuberculosis among the cattle of the State should be encouraged and rules should be adopted by local health boards forbidding the promiscuous display upon the streets of fruit, candy and cakes and other articles of food which must become laden with dust and disease germs. All articles of food should be in glass cases and protected from all kinds of filth.

These are some of the things which it is the duty of the State to give to its citizens for the sake of its own financial prosperity. In thus doing the State will fulfill the highest function of government.

THE DANGERS OF THE "LONG TUBE" NURSING BOTTLE.*

By ERNEST WENDE, M. D., B. Sc.,

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No time need be occupied before this audience with the details of infantile mortality from diarrheal diseases, its deplorable rate

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and the causes which are responsible for it. These latter have been carefully studied, and are, briefly — bad air, summer heat, ignorance of simple hygiene, and especially artificial feeding.

To the correction of all these possible factors have been directed the efforts of municipal authorities, medical profession, societies, philanthropists and others.

Tenement-house construction has been corrected and regulated by ordinance, the evils of the heated term mitigated by fresh-air missions, free ice and the like, maternal ignorance enlightened by educational circulars, and finally, sanatory protection has been given to milk from dairy to nursery as has been extended to no other industry, and this largely, if not almost entirely, with the interest of infantile feeding in mind.

While all these causes of diarrheal diseases in infancy have, as stated, been carefully studied and their influence minimized, and while also the so-called long tube nursing bottle has been condemned, the extent of its evil possibilities, from its intrinsic construction, have been but in part elaborated.

This paper briefly deals with this feature and shows justification for not only interdicting the bottle but doing so by law.

The chain of protection sought to be placed against these most prolific sources of cholera infantum is no stronger than its weakest link, and this weak link has been the apparently innocent but death-dealing long tube nursing bottle.

No factor has been more deadly, none so subtle as this device.

Conceived in the interest of labor and time saving, appealing to the poor and overworked housewife, it has invaded the home under false pretence as has no other appliance, but has left in its trail a record but of mortality.

Its dangerous possibilities, now well known, have caused the physician to taboo it for some time, yet its convenience has been so great, and its innocence so reasonable, that its apparent merits have, in only too many instances, been considered above the warnings against it.

So certain is its malignant bearing upon the artificially fed infant that its manufacture, sale and use should be prohibited by law, and recognizing this fact, it has been so interdicted by the Department of Health of the city of Buffalo.

The peculiar features of danger from its employment may be summarily stated, that owing to its construction and material, and to the use to which it is put, probably no better incubator of pernicious micro-organisms and their toxins could be easily designed, as none has proven so successful.

To the details, which render this statement plausible, your attention is asked, as well as to the experimental work which has been done in absolutely demonstrating, step by step, the vicious results created by the utilization of this contrivance, and how and why it is vicious; why it should, in all communities, be condemned and prohibited.

Its popularity and foothold have been so strong, that it also has had a commercial significance and its abolition in Buffalo has not been without remonstrance and even the cloud of possible litigation.

With the elimination of this — the greatest source of artificial infant food contamination in the household, with a judicious observance of sanitary care of milk in homes, as supplementary to official surveillance of possible and preventable causes, it is not visionary to expect a reduction in death-rates in proportion as efforts based on our present knowledge can be made effective.

As milk is an almost universal food for bacteria, its reception in a rubber tube, acquired from a coagulum that is normally cavernous and unstable, invariably presenting surfaces that are rugose and unpolished, rendering asepsis an impossibility, must necessarily augment the conditions favorable for the growth and development of micro-organisms, and finally converts it into a nursery which produces conditions favorable to cholera infantum.

To establish, beyond peradventure, the danger of these tubular thoroughfares for the introduction of pathogenic microbes into the infantile economy, and the justification of suppressing them by legislation, I, as a health official, resorted to a series of investigations, microscopically, bacteriologically and chemically.

The microscopic examinations of transverse sections, cut from unemployed rubber tubes taken from nursing bottles procured at the various drug stores of our city, revealed the fact that they

were manufactured out of rubber sheeting cemented together at their longitudinal margins to complete the tubes, and the seams thus formed were found unfailingly imperfect in their construction, showing, throughout their entire length, elongated pits and sinuses, which, in their functions, can only be likened to our modern bacteriological "breed ovens."

In some instances, this state of affairs was further intensified in that the tubes were constructed of more than one layer, between which such enormous spaces were frequently developed, directly connected with the lumen of the tube by the numerous pits and sinuses referred to, as to more or less involve their entire circumference.

Moreover, the sections, likewise, demonstrate that the material used in the manufacture of this tubing is devilishly porous, and that the pores vary amazingly in size and shape.

Again, often, pockets were seen communicating with the inner surface of the tube, while, in several specimens, distinct channels were visible connecting similar pits or pockets with cavities in the substance of the rubber.

It would, indeed, be difficult to imagine a more efficient arrangement for the propagation of germs.

By reflected light, under the microscope, the inner surfaces exhibit a view apparently made up of roughened and scraggy elevations and depressions with many openings and clefts, extending deeply into the texture. All the features of the imperfect seams, by this means, are easily discernible and can be readily traced and studied throughout their entire length.

Therefore, it is obvious, that any foreign material, gaining entrance to this perilous combination of pits, sinuses and porosities, cannot be removed by any of the ordinary methods of cleansing, however vigilant and faithful be the mother or nurse. Yes, it is extremely doubtful whether bacteria, when once lodged in these incubators, can be displaced or even destroyed by any known germicide or chemical.

From the bacteriologic examination of an infected rubber tubing, we were able to recognize a deposit of decomposing material coating the inner surface, being the thickest in those

portions of the lumen in close proximity to the nipple and glass tubing.

This debris was found, upon further investigation, to consist of coagulated casein with innumerable bacteria of varied morphology.

The qualitative bacterial examination of the material demonstrated the *Bacillus Acidi Lactici* to be the predominating organism.

The *Staphylococcus Pyogenes Aureus* and *Oidium Albicans*, with three other distinct species, two of which belonged to the non-chromogenic bacilli, the third being a chromogenic micrococcus, were present, and in addition several species not yet completely isolated.

Five decigrammes of this grumous conglomeration dissolved in 2 c.c. of sterile water and injected intra peritoneal into each of three full grown guinea pigs, weighing respectively 200, 254 and 261 grammes, produced death of the animals in from forty-eight to sixty-one hours.

Segments of the infected rubber tubing were placed in small vials, and kept in an incubator at a temperature of $98\frac{1}{2}^{\circ}$ F. for twenty-one days, after the elapse of which time the specimens thus prepared were either in part softened or completely disintegrated, while on the other hand, like pieces of the infected tubing, soaked for a few moments in a five per cent. solution of carbolic acid and subjected to the same temperature, were not similarly affected.

The conclusion drawn from this experiment verifies the fact that the prolonged effect of decomposed milk upon rubber will mash, mangle and disintegrate it.

From a chemical analysis and investigation, this process of decomposition and divulsion was found to be due to the formation of lactate of zinc, which was soft and hygroscopic.

It is proper to state here that the bacteriological work was done by Dr. William G. Bissell, Bacteriologist of the Department of Health of the city of Buffalo; the chemical by Prof. Herbert M. Hill, City Chemist, and also of the University of Buffalo; while the photo-micrographs were prepared by Mr. Thomas P. Whittier, of Rochester, N. Y.

ACUTE GASTRO-ENTERIC RHEUMATISM.*

By GLENWORTH R. BUTLER, M. D.,

Brooklyn, N. Y.

Within brief compass it is desired to call attention to one of the somewhat varied manifestations of rheumatic fever. This manifestation has not to my knowledge been described in the accepted text-books, although in conversation with other practitioners similar cases have been related. The first instance of the kind which attracted personal attention was seen four years ago, since which two others have been encountered. The essential points of the primary case in synopsis are as follows:

Patient is a woman, unmarried, thirty years of age. Has had several attacks of acute articular rheumatism during past twelve years, which left no cardiac damage. Has occasional gastric disturbance (pain after eating, flatulence, nausea, seldom vomiting). When first seen was suffering from follicular tonsilitis with the usual temperature of 103° . Diphtheria excluded by culture. This subsided in three days and the patient was apparently convalescent when the temperature, which had reached the normal, rose to 101° , with vomiting, nausea, abdominal pain, and marked constipation. There was general abdominal tenderness, and moderate rigidity of the muscles of its wall. It is proper to state here that largely as a matter of routine in such cases the appendix was suspected and a negative opinion obtained from a very competent surgeon, the subsequent course of the disease justifying the negation of appendicitis. For two days the vomiting was incessant and uncontrollable, the pain sufficiently severe to require hypodermic morphia, the urine loaded with urates, the bowels were moved with difficulty by enemata, and the thermometer ranged from $99\frac{1}{2}^{\circ}$ - $100\frac{1}{2}^{\circ}$. On the third day there was pain with some swelling in the wrists and ankles. This afforded a clue to the nature of the case, and in spite of the vomiting a salicylate was given and, after two or three doses, retained. Either because of the medication or as a result of natural variation, the gastro-intestinal symptoms rapidly subsided, while the articular manifestations continued in varying degrees for two weeks longer. That the employment of the salicylate had some influence on the gastric condition was evident from the fact that

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on two occasions during this period its stoppage resulted in a reappearance of the nausea and abdominal pain.

In view of this experience two other cases of a similar kind were satisfactorily explained. One of these, occurring in a child of twelve years, was almost a replica of that just described; the other in an adult, beginning with articular involvement, presented an intercurrent attack of vomiting with constipation, during which the joint symptoms were in abeyance, returning to a less extent as the gastro-intestinal symptoms disappeared.

I am quite aware of the slenderness of the data from which an induction may be made, but in view of certain considerations, I am satisfied to consider that in these instances the gastra-intestinal symptoms were due to the active agent of rheumatic fever. The considerations upon which this judgment is based are as follows:

By the majority of the later writers acute articular rheumatism is looked upon as a non-contagious acute infectious disease, the specific micro-organism not as yet having been identified. The tendency to involvement of the serous membranes, the rapidly occurring anæmia, the leucocytosis, are characteristic of a septic disease. So also with the irregular fever, the multiple joint symptoms, and the tendency to relapse, as well as the irregular epidemicity of the disease. The hypothetic toxin affects by preference fibrous tissue and serous membranes, articular and non-articular.

The symptoms in these cases differed essentially from those of an ordinary acute gastro-enteritis in the absence of diarrhœa, and of mucus in the stools obtained by enemata or laxatives, nor did the vomitus exhibit the characters of a catarrhal gastritis. In other words, the inflammatory process did not apparently affect the glandular mucous apparatus of the digestive tract, but rather its fibrous elements.

One of the striking characteristics of rheumatic fever, viz., its tendency to alternating involvement of different portions of the body was manifested in these instances, the disease affecting in two cases first the tonsils, then the digestive tract, subsequently the joints; in one case joints, stomach and intestines, joints, subsiding in one and appearing in another set of structures.

Attention was first attracted to this feature of rheumatic fever by the article of Lyman of Chicago on the chronic form of gastro-

enteric rheumatism (*Am. Jour. Med. Sci.*, CVIII, No. 6, 1894). There seemed at the time to be no reason why the acute toxic disease should not at times act aberrantly, just as other acute infections may. Scarlet fever, diphtheria, lobar pneumonia, and typhoid fever in varying proportions will exhibit departures from the usual type with reference to localized lesions and the organs affected, and there is a broad analogy in the general behavior of the acute infections.

The diagnosis of this particular aberration from the ordinary seat of the disease (its existence being admitted) is perhaps sufficiently set forth in the account given. The occurrence of severe abdominal pain and some tenderness, with vomiting and constipation preceding or alternating with tonsilitis and articular rheumatism, constitute its special features. The clinical interest of the attack lies largely in its differentiation from other acute and painful abdominal conditions which were strongly suggested by the observed cases, especially appendicitis and acute intestinal obstruction.

Correspondence

REQUIREMENTS IN GERMANY FOR GRADUATION IN MEDICINE.

MUNICH, BAVARIA, *February 7, 1899.*

The medical course, instruction, and requirements in Germany differ so materially from those we are familiar with in the United States that it may not prove uninteresting for the readers of the ANNALS if the German methods be briefly outlined, leaving comparisons, invidious or otherwise, for the reader.

All the preparatory work is done in the gymnasium, a place for mental rather than physical exercise. Boys as young as six can enter and the average age for graduation is about twenty. At the age of fifteen a government examination is held, which if passed enables the student to serve but one year in the army, and that with many privileges. The boys in the gymnasia have to work very hard in school about eight hours a day and are assigned long lessons to learn home, and in many cases it certainly makes "Jack a dull boy."

The prospective medical student is obliged to take the classical course and to pass very stiff examinations in order to graduate. To the medical student alone is the privilege given of breaking up the military service into two halves, the first six months being served before the twenty-fifth year and the remainder after graduation in the medical corps.

When a student has graduated from the classical gymnasium he is at liberty to enter any university in Germany, Austria-Hungary or Switzerland, and time spent in any one of these will count in the graduation requirements of any of the others. This permits a student to take up special lines of work in different universities under the most famous men. The medical course is one of the longest and hardest. A man must attend lectures for nine semesters before he is allowed to "come up" for the State examination.

There are two semesters a year, the winter extending from the middle of October until March, the summer from April to August. The German student does not have the benefit of recitations. The method employed for instruction in all clinical branches is that of demonstrating cases before the class and the students are called down in turn to examine the case and be criticized and "quizzed" very closely by the professor. No record is kept of attendance, but it is to the best interest of the student to be present when he is called upon to examine a case.

The only examinations during the nine semesters occur at the end of the fourth, when the student must pass in anatomy, physiology, chemistry, materia medica, zoölogy, botany and physics. The remainder of the medical course deals more with clinical and practical work. Before a student can take his final examinations he must have attended a course in hygiene and vaccination, and procure what is called a vaccination certificate.

In the tenth semester the student presents credentials that he has attended nine semesters in medicine and passed the preliminary examinations, and paid all dues, etc. The first final examination is the "State" examination, and must be passed before the examination for a doctor's degree can be taken.

With all preliminaries satisfactorily arranged, the dean of the medical faculty assigns first the subject of anatomy, and the student must call on the professor and obtain an appointment for his examination. The interval between the assignment of

the subject and the call on the professor is limited to eight days, which, however, may be extended by procuring a sick certificate from a kind-hearted physician.

Several students "go up" for examination at the same time, although they are examined separately. Anatomy is a very thorough examination and the candidate must first do some dissection and demonstration upon the cadaver and then undergo a long oral examination. The examinations in anatomy and physiology must be passed before the remainder can be undertaken. If a man fails he is told to return for examination in from six weeks to three months, depending on the knowledge he displayed. There is no limit to the number of times one may return, and cases are on record where it took several years to successfully pass the State examination. After passing anatomy and physiology the student may choose five other subjects. In Heidelberg the examination in medicine covers pharmacy, therapeutics, diseases of children and general medicine. The surgery examination embraces general surgery, topographical surgery, operations on the cadaver, bandaging and ophthalmology.

In each of the clinical branches the student has a case in the hospital wards for one week which is under his entire charge. He must keep all the records, make a thorough examination daily, diagnose, prescribe, note course of disease and effect of the treatment and examine the excretions. He also has to examine two dispensary cases in the presence of a hypercritical professor. Then comes a long oral examination. None of the examinations are written, and after spending a couple of hours with a student the professor can generally determine a man's knowledge of the subject. These "interviews" are carried on with great formality and the student always dresses in a long black coat or even appears in full evening dress.

On successfully passing the State examination it is possible to practice medicine in Germany without a doctor's degree.

The examination for the doctor's degree comes later and is quite different, although much easier. An original thesis must be carefully prepared and submitted to the professor in charge of the department of which the subject treats. When the thesis has been accepted the student presents himself before the professor who examined his thesis and four others whose subjects he himself has chosen. He is examined in his chief subject for

one hour and in each of the others for fifteen minutes. This is done in the presence of the other professors. Before he receives his degree he must have his *arbeit* printed and present 200 copies to the university. Later a copy is sent to each professor and to all the university libraries in Germany.

The average cost of tuition is \$50 a semester, and to procure a doctor's degree and have the thesis printed, etc., costs about \$75. The cost of living does not differ materially from that in America.

It is not necessary for a foreigner to take the State examinations unless he intends practicing in Germany. He must, however, write a thesis and pass the doctor's examination before he can take a degree.

H. L. K. SHAW.

FEIGNED INSANITY.

MATTEAWAN STATE HOSPITAL,

MATTEAWAN, N. Y., *February* 10, 1899.

EDITORS, "ALBANY MEDICAL ANNALS," *Albany, N. Y.*

Dear Sirs:—The two cases reported in the daily press and quoted in the ANNALS as examples of feigned insanity, may furnish interesting reading for the general public; but, before considering them as of much service clinically, full and authentic histories should be obtained, especially in the case of Diffenderffer. The first instance quoted cannot be seriously considered as adding anything of much value to the question. A train conductor who should be informed that he had a lunatic to deal with would hardly pay much attention as to whether the disease was real or simulated. His only anxiety would be to get the individual off his hands and safely delivered to the custody of the proper officers or friends.

The writer once had occasion to transfer a carload of insane criminal lunatics several hundred miles by rail. After we were well upon our way the conductor approached the officer in charge and said, "Who have you as passengers in that car?" He was told that they were insane criminals. "Your ticket calls for sixty; how many have you?" was next asked. "Sixty," was the reply; and, then, with a smile, "Would you like to go in and

count them?" "No," said he, "I'll take your word for it," and, after an earnest gaze through the closed door of the car, he added: "I wouldn't go in there for a hundred-dollar bill." Several auctioneers could have ridden home with us that day and no questions asked.

Actual instances of the successful feigning of insanity coming under the observation of physicians are rare, and in this connection, a complete account of the case of Diffenderffer would be very interesting to the profession. Criminals furnish the majority of cases wherein doubt arises as to the actual mental condition of the offender. Numbers of such supposed simulators are really insane. If the subsequent history of feigners could be traced, many of them would be found to have been committed eventually to a lunatic asylum. The insane are often, in some measure, imposters, and to a shrewd degree, as all know who have had experience with them. Feigners are frequently weak mentally or of a sufficiently degenerate type to be considered insane.

One example occurs to us of a young man who was convicted at Buffalo and sentenced to prison. For years he had displayed attacks of feigned epilepsy in order to attract a crowd. His confederates picked pockets meantime. He would often secure lodging and meals in the same manner, by imposing upon some person's ready sympathy. In the prison, because he did not like the task assigned to him, he practiced the same deception and was sent to the asylum as an epileptic. His fraud was there soon detected, but, as he was much of an imbecile, he is still detained in custody, though his term of imprisonment long ago has expired. He was after a time transferred to one of the State hospitals, where he now remains.

No doubt there are cases of feigned insanity which are successful attempts at deception, but many that are pronounced fraudulent are in fact genuine cases of insanity. The plea of mental derangement is often raised as a defense for homicide, and frequently fails. The defendant is convicted and subsequently the finding of the jury in pronouncing the person sane is reversed by the later history of the offender, who is committed to an insane hospital while undergoing a life sentence. How many are executed in the various States of the Union, we do not know.

Respectfully yours,

H. E. ALLISON.

Editorial

Huntington's
Chorea.

An incident of the meeting of the New York State Medical Society, held at Albany last month, was the presence of Dr. George Huntington, who first described the form of chorea which bears his name. Dr. Huntington presented no formal communication to the Society, but in private conversation talked most instructively about the disease which has made him famous. Contrary to the general impression and the statements of other writers, he believes that the disease is exceedingly rare, and with the exception of the families, which were the occasion of his original contribution, he has not seen any case in twenty-five years. This opinion necessitates the distinction of Huntington's chorea from other forms of adult chorea. The salient points of the disease — hereditary transmission, adult life, and progressive mental failure, with a very decided suicidal tendency — are essential to the diagnosis. Dr. Huntington has made a further observation, which has never yet been recorded, except by himself, that when the disease does not appear in any given generation, it disappears entirely from the family, excepting that such descendants are markedly nervous, especially when under excitement, or during sickness, but not specifically choreic. This may be regarded as pathognomonic. In the absence of the family record, the differential diagnosis may be extremely difficult, or impossible, but an acute observer who has had experience in the various manifestations of chorea, might be able to distinguish Huntington's progressive form. The mental manifestations of cases of Huntington's chorea are varied, but often distinctive, as indicated above. A marked peculiarity is the reticence of the patients regarding their disease, and the strong disinclination to converse about it, or even to approach or consult a physician. This idiosyncrasy is so marked that an opportunity to observe a case in which the disease prevails, for purposes of studying its varied manifestations, is very difficult to obtain.

The disease has also been known as "Progressive Choreic Dementia," but will probably always be best known as Hunting-

ton's chorea. The peculiar mental characteristics suggest the thought that further opportunities for observation and study may be found in institutions for the insane.

Professor T. Clifford Albutt, of Cambridge University, in a recent address before the Johns Hopkins' University, pointed out that the stupendous advance of modern surgery was due to the discovery of anæsthesia and to the researches of Pasteur, which laid the foundation of modern bacteriology.

Before the era of anæsthesia, time was all important, but with the use of anæsthetics, slap dash surgery was ended and time was given for the theories of Pasteur and Lister to be put into practice. The characteristic of modern science is the study of origins, and this study in medicine is leading to a revolution in our therapeutics. Death is not to be driven away by any cunning compilation of drugs, but is to be prevented by the subtler knowledge which consists in knowing all the moves in the game and in the use of nature even against herself. In the sixteenth century the great laboratories of anatomy sprang into existence, in the seventeenth the laboratories of physics, in the nineteenth the chemical, physiological and pathological, and the end of this century sees the beginning of the clinical laboratories, which is to be the scene of the study of the origins of disease. Lectures, however, must not be entirely discarded for they bring us into mental contact with great minds who have been over the field before us, who can show us how they worked, how they systematized their knowledge and how they inspired it with human interest. True success, however, must be based on an education in letters and in the humanities, as well as in the laws of the material universe. Latin and Greek, which are the most virile and beautiful of languages and contain the most devoted, mental, spiritual and social ideals, should be eagerly studied. True, but, after all, the glory of medicine is that we are concerned not only for mankind but for man, and that the physician's ideal is to bring healing or solace to his human fellows. The philosopher would sacrifice man to the State; the priest, man to the church; the evolutionist, man to the race, but the physician is the minister not only of humanity, but of man himself—even the humblest.

**The
Non-Medical
Treatment of
Epilepsy.**

Dr. Hurd, in a paper before the Johns Hopkins' Medical Society, laid emphasis upon the unsatisfactory results following the medical treatment and the very few successes from the surgical treatment of epilepsy. This is due to the fact that the epileptic paroxysm has been regarded as the totality of the disease. The extremely weak nervous system often inherited and the defects in metabolism by which the weakened system becomes poisoned are too often disregarded. The general effect of the bromides and of similar remedies has been not to prevent the generation of this poison, but merely to restrain its manifestation in an epileptic attack. Such restraint is frequently followed by an accumulation of poison and a resulting furious convulsion greater in force than the minor paroxysms prevented. These poisonous substances are probably leucomanies, but their exact relations to the disease have not been fully worked out. The treatment, which is giving the best results, consists of the greatest allowance possible of open air life, control of the diet, with careful regulation of the amount of nitrogenous food ingested and the necessity of daily, useful occupation.

**New York
State Medical
Society.**

The ninety-third annual meeting of the Medical Society of the State of New York was one of the most successful medical gatherings in many years. The attendance was unusually large, the papers presented were able, the discussions animated and interesting, and the annual dinner well attended and thoroughly enjoyed. Although the number of papers was appallingly large, more than seventy, the program was easily carried out. There seemed no curtailment of time for discussion, as much less time than usual was given to the business affairs of the Society and there was less disagreement upon these.

Unfortunately, all the papers upon military medicine were not presented owing to the illness of the writers, but those read indicated the thorough manner in which the subject was being considered.

The discussion upon the pathology of cancer proved of great interest, and the experimental work, which is being carried on under Dr. Park's supervision, very properly received the commendation and endorsement of the Society. Dr. Osler's address

upon typhoid fever was a classic; much of course was expected, but even more was received. His quotation characterizing our glorious land as "God's own country with man's own back-yard and the devil's own cesspool," is a true picture of how wretched has been our stewardship of the ten talents and is a sad commentary upon the puerility of our too often exhibited vain glory and boasting. This address should be printed in every newspaper that the people and those in authority might understand the eternal truth of the Mosaic axiom that "cleanliness is next to Godliness."

Dr. Jacobis' address upon intestinal antiseptics was a mine of clinical experience, thoroughly analyzed and critically deduced. It is certainly an inspiration to behold this Nestor of medicine, full of honors, still advancing in the first ranks and grappling nobly with each new problem of medicine.

The splendid work of the Business Committee was fittingly recognized by the Society in the election of its chairman, Dr. Willis G. Macdonald, to the presidency. Albany certainly feels honored and believes the program for next year will prove the wisdom of the choice.

"To See Oursel's as Others See Us." "Mr. Dooley," whose reflections and observations, humorous and pathetic, have recently received the attention of the reading public, has passed upon expert evidence, and his account of a murder trial has been accepted by a contemporary as "a very fair exposition of the absurdity of our judicial system."

The ANNALS has already presented several communications upon expert evidence, and leaves its readers to determine the fidelity to fact of the following:

"Prifissor," says th' lawyer f'r th' State, "I put it to ye if a wooden vat three hundherd an' sixty feet long, twenty-eight feet deep, an' sivinty-five feet wide, an' if three hundhred pounds iv caustic soda boiled, an' if th' leg iv a guinea pig, an' ye said yestherdah about bicarbonate iv soda, an' if it washes up an' washes over, an' th' slimy, slippery stuff, an' if a false tooth or a lock iv hair or a jawbone or a goluf ball across th' cellar eleven feet nine inches — that is, two inches this way an' five gallons that?" "I agree with ye intirely," says th' profissor. "I made lab'ratory experiments in an ir'n basin, with bichloride iv gool,

which I will call soup-stock, an' coal-tar, which I will call ir'n filings. I mixed th' two over a hot fire, an' left it in a cool place to harden. I thin packed it in ice, which I will call glue, an' rock-salt, which I will call fried eggs, an' obtained a dark, queer solution that is a cure f'r freckles, which I will call antimony or doughnuts or anything I blamed please."

"But," says th' lawyer f'r th' State, "measurin' th' vat with gas — an' I lave it to ye whether this is not th' on'y fair test — an' supposin' that two feet acrost is akel to tin feet sideways, an' supposin' that a thick green an' hard substance, an' I daresay it wud; an' supposin' you may, takin' into account th' measure-mints — twelve be eight — th' vat bein' wound with twine six inches fr'm th' handle an' rub iv th' green, thin ar-re not human teeth often found in counthry sausage?" "In th' winter," says the profissor. "But th' sisymoid bone is sometimes seen in th' fut, sometimes worn as a watch-charm. I took two sisymoid bones, which I will call poker dice, an' shook thim together in a cylinder, which I will call Fido, poored in a can iv milk, which I will call gum arabic, took two pounds iv rough on rats, which I rayfuse to call; but th' raysult is th' same." Question be th' coort: "Different?" Answer: "Yis!" Th' coort: "Th' same." Be Misthur McEwen: "Whose bones?" Answer: "Yis." Be Misthur Vincent: "Will ye go to th' divvle?" Answer: "It dissolves th' hair."

Scientific Review

Little's Disease.—Heveroch contributes an exhaustive paper upon Little's Disease to the *Wiener klinische Rundschau*, Nos. 46, 47, 48 and 49, 1898. The principal consideration, with which he introduces his discussion, is that Little's disease is neither an anatomical nor an ætiological unity, but must be regarded solely as a clinical combination of symptoms. Similar conditions have been manifested in all ages, and the peculiar assemblage of symptoms has been recognized and described. Shakespeare suggests the disease, in Gloucester's description of himself, in King Richard III:

"I that am curtail'd of this fair proportion,
Cheated by feature, by dissembling nature,
Deform'd, unfinish'd, sent before my time
Into this breathing world, scarce half made up,
And that so lamely and unfashionable
That dogs bark at me as I halt by them."

The most ancient writing upon this subject is found in the "Apokolokinthosis" of Seneca, who describes the family of the Roman Emperor Claudius. The first emperor of this family, Tiberius, was melancholy; the second, Caligula, was a paranoiac; Claudius was an idiot, and the fourth, Nero, suffered from a periodic psychosis. Epilepsy was present in many members of the family. Claudius was deformed from birth. His mother called him a human deformity, who had begun according to nature, but had not been completed. His countenance showed an expression of oppression, embarrassment and anxiety. When agitated he made purposeless movements, saliva drooled from his mouth, and he indulged in a monotonous laugh. From the nose usually hung a drop of mucus. His voice was rough and hoarse and he stammered. His head and hands were in constant unrest. In walking his weak limbs could hardly support his body, and his gait was uncertain, irregular, and the right foot, which had been lame from birth, dragged behind. Heveroeh has nowhere in the literature found the statement that Claudius suffered from Little's disease, but from the descriptions given he thinks he is justified in assigning this diagnosis upon the following symptoms: idiocy, salivation, dyslalia, paresis of the feet, uncertain and shuffling gait and choreiform movements.

Little's disease has been known by a variety of names. Little himself called the condition "congenital rigidity of the extremities;" Stromeyer, "permanent infantile tetanus;" Benedikt, "paraplegia et hemiplegia spastica infantilis;" Adams, "spastic infantile paralysis;" Erb, "spastic spinal paralysis in children;" Seguin, "tetanoid pseudoparaplegia;" Gee, "spastic diplegia;" Delpech, "idiopathic muscular spasm;" Heine, "spastic cerebral paraplegia;" Charcot, "tabes dorsal spasmodique;" Rupprecht, "Little's disease;" Freud, "diplegia cereбрalis;" Marie, "tabes dorsal spasmodique vrai."

The disease begins in earliest childhood, often manifesting itself from the time of birth. The history often shows premature

birth or a difficult parturition, as well as infectious diseases and psychical or physical trauma. The principal and most frequent symptom is the spastic contracture of all four or only two extremities without paralysis. The bodies often show indications of abnormal development; the eyes often reveal marked nystagmus. Bulbar symptoms may occur, as disturbance of speech, difficulty in swallowing and defective facial expression. The spasm of the extremities is accompanied by increased reflexes, although these are sometimes difficult to elicit; and in addition to the spasm there are often to be seen choreiform and athetotic movements. Occasionally muscular atrophy is noted, while as a rule the activity of the sphincters is unimpaired. Sensibility is generally intact. The disease usually remains unchanged after it is developed, and occasionally shows a slight gradual improvement. It is plainly shown by the symptoms, which have been recorded, that it is an affection of the motor tract, and also of the upper neurone, situated in the cortex, which accounts for the occasional appearance of an additional group of symptoms, such as convulsions in early infancy, epileptic attacks and various grades of disturbance of the intellect, from simple defect in intelligence to the most profound idiocy.

The ætiology is chiefly concerned with three factors: protracted labor, asphyxia neonatorum and premature birth. In addition to these causes may be considered secondarily infectious diseases in infancy, physical or psychical traumata and convulsions, although these last may be more properly considered as beginning symptoms.

The symptomatology permits a classification of several types: (1) general spastic rigidity; (2) paraplegic rigidity; (3) spastic bilateral hemiplegia; (4) universal chorea and bilateral athetosis. These conditions have been summarized by Brissaud as follows: "Spastic and congenital paraplegia of all four extremities, most pronounced in the lower; particularly occurring in premature infants, and characterized by the peculiarity that the spasm is much more widely spread than the paralysis; that it may further be complicated with convulsions, and with disturbance of the intellect, and, although not permitting complete recovery, yet permitting improvement."

Brissaud believes the disease to have its origin in the paracentral lobules, basing the supposition upon studies of Charcot

and Souques. According to him the pyramidal tracts which carry impulses from the cortex to the spinal centres, are not a specialized structure, capable after premature birth of a normal physiological function, but merely permit the development of a morbid tension of the muscles. The contracture which follows is similar to the contracture of descending degeneration of cerebral origin, but differs from it in the fact that there is no degeneration in Little's disease, as the pyramidal tracts have not been developed, primarily. Van Gehuchten's opinion upon this point is summarized as follows: "This affection is to be attributed solely to inhibition of the development of the pyramidal fibres. These represent the axial prolongation of the nerve cells of the Rolandic area. By their development impulses are conveyed from the cerebral cortex to the gray substance in the underlying regions of the spinal cord. In the seventh month these axial prolongations have not been completed beyond the cervical cord. If the child be born at this time, and the development of the axis cylinders is inhibited, the cortico-spinal tract is destroyed, and spastic conditions of necessity ensue. This symptom is entirely independent of the brain, inasmuch as the cortex has no part in it. And inasmuch as it is a spinal symptom, and also on account of the ætiological conditions, from which it arises, I call the disease '*Rigité spasmodique spinale des enfants nés avant terme.*'" This supposition of Van Gehuchten's seems to ignore the interdependence of the axial prolongations of the cells upon the cells themselves, and that degenerative conditions of nerve fibres result from disease or interruption of the path of the fibre from the cell. It would follow, therefore, that this explanation of the disease as of spinal origin is incorrect. The cerebral origin of the disease is further demonstrated in cases of hemiplegic character, and Heveroch reports an instance of Little's disease in which there were, after a forceps delivery, right-sided hemiplegia, the hand being more severely involved than the leg; diminution of the intelligence, with irritability; impaired fixation of the eyes, with rotating and horizontal nystagmus; hemianopsia homonyma dextra; incomplete atrophy of the right papilla; contracture of the facialis; paresis of the right hypoglossus; diminution of sensibility of the right side, and poor ability to localize on the right side; athetosis of the right hand, and no impairment of the sphincters or of the internal organs. It is plain from such

a case that not only is the disease of cerebral origin, but that the lesion is not necessarily confined to motor regions.

Heveroch cites further cases in illustration of the various types of the disease, and makes the following classification:

1. Cerebral Hemiplegia.
2. Cerebral Monoplegia.
3. Cerebral Diplegia, of the following types:
 - a. Universal cerebral rigidity.
 - b. Paraplegic rigidity, and its sub-form — Brissaud's type.
 - c. Bilateral hemiplegia.
 - d. General chorea and bilateral athetosis.

The pathological findings in cases of Little's disease are of the most varied character, among which the principal changes are: plaques jaunes, porencephalies, post-hæmorrhagic cysts, agglutination of the meninges with the cortex, defects of the cortical neuroglia, exudations in the cortex, and diffuse atrophic and hypertrophic sclerosis. Hydrocephalus, encephalitis hæmorrhagica, and diffuse or local sclerosis have been described by Ganghofner. Heveroch discusses fully the differential diagnosis, and also mentions instances in the literature in which a family tendency to Little's disease has been seen. His exhaustive contribution closes with a consideration of the nervous functions of the structures involved in the disease, and the changes occurring in these functions.

State Medicine

Edited by Harry Seymour Pearse, M. D.

The Adirondack State Hospital.— On February twenty-first, there was a hearing before the Senate Finance Committee on Senator G. A. Davis' bill appropriating \$200,000 for the erection, care and maintenance of a hospital for the treatment of tuberculosis in the Adirondack forest preserve. There was no opposition to the bill and Senator Davis feels assured that the measure will be successful.

Dr. Arthur G. Root, of Albany; Dr. John H. Pryor, of Buffalo, and Dr. S. A. Knoff, of New York, addressed the committee in

favor of the bill. Dr. Root suggested that equal representations of the three recognized medical societies be given on the board of trustees, and since the Society of United Charities had asked for a woman representative, that the board of trustees be enlarged to seven members. In the matter of medical examiners, Dr. Root thought that instead of being appointed from Buffalo, Syracuse and New York alone, Albany and Rochester should also be included, and upon Senator Higgins asking the advisability of having a medical examiner from each city, Dr. Root stated that was just the desire of the medical societies.

Dr. Pryor said that the State should take up this matter of a tuberculosis sanitarium, because the cities and counties could not, by reason of not having a suitable place for the establishment of such an institution. He was of the opinion that the Adirondacks are a better place for treating consumptives than Colorado. He believes that if this bill is passed and the sanitarium is established, the mortality from this disease will be decreased fifty per cent. in ten years. Massachusetts and other States have already taken action on similar measures.

Mr. Frank Tucker, general agent of the New York Association for Improving the Condition of the Poor, and Mr. Edward T. Devine, of the Charity Organization Society of New York, also favored the bill in the interest of the poor.

Proposed Legislation.—At the recent meeting of the State Medical Society, the President, in his inaugural address, presented several matters for which legislation was proposed.

The advisability of granting licenses to mid-wives is questionable, for if we grant to them the special privilege of practicing medicine to this limited extent, we will have to admit the justice of the claims of the opticians, osteopaths, Christian scientists, and the dermatological quacks. It is recommended that this question be placed entirely under the control of the State Board of Medical Examiners.

Dr. Ernest Wende, in his paper on "The Dangers of the Long Tube Nursing Bottle," stated that the long tube nursing bottle is a prolific source of cholera infantum; that no better incubator could be devised for the development of germs, and that the ordinary methods of cleansing cannot remove the danger. As a

result of Dr. Wende's investigations, Dr. A. Walter Suiter, of Herkimer, offered a resolution, which was carried, that the Medical Society of New York procure the enactment of laws to prohibit the sale of long tube nursing bottles.

Dr. William G. Bissell, of Buffalo, presented a paper on "The Detection of Tubercular Infection in Second-hand Clothing." His conclusions were based upon the result of investigations carried on by him in the health department of Buffalo, regarding tubercular infection. In connection with military duties, his attention had been called to the fact that several members left the organization on account of tuberculosis. At that time the uniforms and overcoats, when discarded by an outgoing member, were assigned to the next raw recruit. According to his views, these uniforms of men who had contracted tuberculosis were capable of transmitting that disease to the next wearer. Experiments were conducted to prove this, and the results proved the great danger of communicating tuberculosis by clothing worn by consumptives. After the reading of this paper, Dr. H. R. Hopkins, of Buffalo, offered a resolution, which was carried, that the Society approve the matter of municipal control of dealers of second-hand clothing and refer it to the Committee on Legislation.

The State Board of Medical Examiners earnestly recommended that the Committee on Legislation of this Society prepare a bill making it a penal offense for any person to obtain from a charitable medical institution gratuitous services, by persons financially able to compensate for the same, in the same manner that under existing laws it made it a penal offense to obtain money under false pretenses. This committee also recommended that the Committee on Legislation be specially instructed to make every effort possible to effect the restoration of the original appropriations of \$5,000 for the care and maintenance of the State Medical Library and that the co-operation, in this respect, of the Legislative Committee of the Homeopathic and Eclectic Societies be requested.

An "Osteopathist's" Suit Against a Medical Journal.—At the recent meeting of the Medical Society of the State of New York, Dr. A. M. Phelps, of New York, introduced the following preambles and resolution, which were unanimously adopted:

Whereas, We, the regular practitioners of medicine, are opposed

to anything which, under color of law, can foster the operations of charlatans without medical knowledge; and

Whereas, The class of quacks known as "Osteopaths," have received medical legislative recognition in several States; and,

Whereas, A certain William Smith, osteopathist, has been denounced, together with his fellow charlatans, by the *Medical Age*, and now brings suit against both the publisher and the editor of the *Medical Age* for damages in the sum of twenty-five thousand dollars;

Therefore, Be it declared as the sentiment of the Medical Society of the State of New York, that the editor and publisher of the *Medical Age* are entitled to the sympathy of the members of this Society and of all medical practitioners; that we wish them success in repelling this legal assault; that we recognize in their action a valuable effort toward the suppression of such irregularities in medicine; and that we recognize that when the *Medical Age* takes such a bold stand in opposition to quackery, it promotes the interests of legitimate and honorable medicine and the welfare of humanity.

Important Bills in New York Legislature.—Assembly bill No.

440. An Act "To continue investigations into contagious abortion in cows, and other infectious diseases of animals, and to advance veterinary science in the State of New York."

Introduced by Mr. Johnson.

This bill is to extend the equipment of the New York State Veterinary College, and to appropriate to said college the sum of \$15,000.

Assembly bill No. 441. An Act "Making an appropriation for the Craig Colony for Epileptics." Introduced by Mr. Kelsey.

Appropriates \$150,000 for improvements and extension of the Craig Colony for Epileptics.

Senate bill No. 443. An Act "For the protection of public health, and to prevent mistakes in the handling of poison." Introduced in Senate by Mr. Wilcox; in Assembly by Mr. Fordyce.

This bill prohibits the sale or disposal of poisons, either upon prescription or otherwise, of any poisonous substance, in quantities of less than eight ounces, except when put up in a box, package, vial or bottle, the shape of which shall be octagonal or polygonal, with serrated edges, and impressed thereupon the cautionary symbol of poison.

Assembly bill No. 464. An Act "To amend section one of chapter six hundred and thirty-nine of the laws of eighteen hundred and ninety-two, entitled 'An Act to exempt the real and personal property of 'Die Deutsche Poliklinik of the City of New York' (The German Policlinic of the City of New York) from taxation.'" Introduced by Mr. Harburger.

This bill provides that the real and personal property of "Die Deutsche Poliklinik of the City of New York," shall be exempt from taxation and payment of water rents, provided that the value of said property shall not exceed \$100,000.

Assembly bill No. 466. An Act "To amend chapter six hundred and sixty-one of the laws of eighteen hundred and ninety-three, entitled 'An Act in relation to the public health, constituting chapter twenty-five of the general laws,' and the acts amendatory thereof and suppelmentary thereto, relating to the protection of potable water supplies." Introduced by Mr. Rodenbeck.

Assembly bill No. 468. An Act "To legalize, ratify, confirm and continue in force rules and regulations heretofore made by the State Board of Health for the sanitary protection of public water supplies." Introduced by Mr. Rodenbeck.

Assembly bill No. 544. An Act "To exempt the real estate of the Beth Israel Hospital Association from taxation." Introduced by Mr. Sanders.

Assembly bill No. 574. An Act "To enable the Loomis Laboratory to convey and transfer its real and personal property." Introduced by Mr. Mazet.

Assembly bill No. 589. An Act "To amend the State charities law, relating to the licensing and regulation of dispensaries by the State Board of Charities." Introduced by Mr. Murphy.

This act defines what a dispensary is and provides that the money used for said dispensary shall be derived wholly or in part from trust funds, public moneys, or sources other than the individuals constituting said dispensary, and the persons actually engaged in the distribution of the charities of said dispensary.

It empowers the State Board of Charities to license dispensaries after proper application, to regulate their control, and, when necessary, to revoke their licenses. Drug stores or tenement houses must not be used as dispensaries.

Assembly bill No. 602. An Act "In relation to the establishment of a State live stock sanitary commission, and to provide for the control and suppression of tuberculosis and other dangerous diseases of domestic animals." Introduced by Mr. E. C. Brennan.

This commission shall consist of the Governor and five other commissioners, to be appointed by the Governor, as follows: The Commissioner of Agriculture, a practical breeder of live stock, the Secretary of the State Board of Health, and two competent veterinarians. Each commissioner shall be appointed for a term of four years, and shall be subject to removal by the Governor. The duty of the commission shall be to protect the health of the domestic animals of the State, and to determine the most efficient and practical means for the suppression of any dangerous or contagious disease among domestic animals. The sum of \$50,000 is appropriated for the purposes of this act.

Assembly bill No. 631. An Act "To provide for the better protection of the public health by requiring certain medicinal and other preparations to be properly labeled." Introduced by Mr. Ten Eyck.

Requires that a label shall be placed upon all medicinal preparations giving a true and complete statement of all the component ingredients entering into their composition, except those issued upon the order or prescription of a regularly authorized practicing physician.

Assembly bill No. 658. An Act "Authorizing the practice of medicine by certain persons." Introduced by Mr. Redington.

This law permits persons who held the rank of surgeon in any

of the regiments furnished by the State of New York in the late war with Spain, to practice medicine within the State of New York, whether said persons had been duly admitted to practice or not.

Assembly bill No. 728. An Act "To amend the public health law, in relation to the adulteration of food." Introduced by Mr. F. Schmid.

This law specifies what substances are to be considered adulterants when mixed with wheat, flour, confectionery, molasses or syrups, preserves or jellies.

Assembly bill No. 768. An Act "To provide for a commission to investigate the nature and value of vaccination, anti-toxine, seropathy and other alleged prophylactics, and to appropriate a sum of money for its expenses." Introduced by Mr. Ware.

The animus and objects of this bill are sufficiently indicated in the requirements for appointment upon the commission:

"Sec. 2. Said commission shall be called the commission on prophylaxis of the State of New York, and shall consist of five members, who shall be appointed as follows: The board of health of the State of New York shall recommend to the Governor of the State some person who is in favor of the use of vaccination, anti-toxine and other serums as prophylactics; the Brooklyn Anti-Compulsory Vaccination League, of Kings county, New York, shall recommend to the said Governor some person who is opposed to the hypodermic administration of vaccine matter and of the said serums; and the Governor shall appoint the persons so recommended by the State Board of Health and by the Brooklyn Anti-Compulsory Vaccination League respectively, to be two of the members of said commission; the Governor shall also select and appoint three other members of said commission, who shall not be practicing physicians, but shall be persons who have formed no fixed opinion upon the subjects into which they are hereby required to investigate. They shall be selected without regard to political affiliations or opinions for the possession by them of the qualities of honesty and common sense."

The salary of the commissioners is to be \$3,400 per annum.

Assembly bill No. 861. An Act "To amend paragraph twenty-three of subdivision twenty-second of section two hundred and thirty of chapter three hundred and seventy-eight of the laws of eighteen hundred and ninety-seven, entitled 'An act to unite into one municipality under the corporate name of the city of New York, the various communities lying in and about New York harbor, including the city and county of New York, the city of Brooklyn and the county of Kings, the county of Richmond and part of the county of Queens, and to provide for the government thereof,' relating to hospitals and dispensaries." Introduced by Mr. Colton.

This bill specifies the amounts of moneys to be appropriated to the different hospitals and dispensaries in this municipality.

Assembly bill No. 902. An Act "To provide for the better health of school children attending the public schools in the city of New York by minimizing the danger of contagious diseases which might be transmitted by infected school books." Introduced by Mr. O'Connor.

This bill provides that school books continuously in use for six months must be destroyed, and all books thereafter must contain on the inside a label bearing the date upon which the book was issued to the pupil.

In Memoriam

X. T. BATES, M. D.

Xyris Turner Bates was born at Lebanon Springs, Columbia county, N. Y., August 11, 1839. He graduated at Yale College in 1862, and after teaching three years in the Rectory School, Hamden, Conn., studied medicine. He received the degree of M. D. (with appointment as essayist, second honor), in 1867, at the Albany Medical College. During a visit to Europe in 1871, he was engaged for some months in the Rotunda Hospital, Dublin, and received a degree from that institution. During this absence, also, he made an extended tour for professional observation and study, spending considerable time in the schools and hospitals of London, Edinburgh, Prague and Berlin. For twenty

years he had an extended and increasing practice in and about his native town. During this part of his life he was for some years editor of the *Journal of Materia Medica*, a monthly periodical of wide circulation throughout the United States and Canada, succeeding in this post his honored father, Dr. Joseph Bates, who died in 1879. He contributed many articles to this journal, among which may be especially mentioned those entitled, "Bacteria in the Bladder," and "The Danger Consequent on the Long Continued Use of Lime Water with Milk," published in 1881 and 1882, respectively, and showing early appreciation of the bearings of the germ theory which was at that time just receiving popular and general attention.

In 1890, finding himself unequal to so laborious a life, he removed to Poughkeepsie, that he might there confine himself chiefly to office work. In 1894, finding further need of relief, he closed his office and thereafter spent his winters in various parts of the South, and most of his summers at the North, restricting himself to consultation calls and literary work.

Many of his old patients, scattered in many different States, continued to give him their confidence and to seek his attention, often coming long distances and tarrying with him for this purpose.

Dr. Bates was for many years consulting physician to one of the oldest, and for many years the most prominent, drug manufacturing firms in the country. His rank and acquaintance was of a high order, but above all else, he was a true man, strong and pure in moral and Christian character, but humble and ingenuous as a little child. He was married September 16, 1875, to Emily Warren of Bangall, Dutchess county, N. Y. Their only child, Joseph Warren, was born January 27, 1877. Dr. Bates, after suffering long with serious heart trouble, died suddenly on January 2, 1899, of an attack of angina pectoris.

CHARLES S. GRANT, M. D.

Dr. Charles S. Grant died in Saratoga, February 6, 1899, from a stroke of apoplexy. Dr. Grant was born on a farm near Hobart, Delaware county, November 29, 1845. He came from Scotch

and English ancestry, and with a physique characteristic of both these races he inherited the persistence and shrewdness of the one and the pluck and energy of the other. He attended the common schools and received sufficient training to prepare him for the High School. His later academic instruction was obtained at the Ashland Collegiate Institute and Business College and the Fort Edward Institute, each of which he attended through a full course. For a short time he filled a clerical position in Hobart. He graduated from the Albany Medical College in 1866, reading the valedictory address. For two years he was assistant and house physician of the Albany City Hospital, and also served a term as house physician at the Albany Alms-house and Insane Asylum Hospitals. To further qualify himself for the duties of his profession, he took three courses at the College of Physicians and Surgeons in New York city. In 1867 Dr. Grant went to Weedsport, where he took charge of the practice of his friend, Dr. Ira D. Brown, who had in that year been elected to the State Legislature, and later removed to Saratoga. In a practice of twenty years alone, his earnings are estimated to have been more than \$350,000. Before failing health compelled him to relinquish a large part of extensive practice, his yearly income was as high as \$20,000. In 1885, Dr. Grant built the Saratoga sanitarium on Woodlawn avenue. This was opened April 1, 1886.

SANFORD J. ENGLE, M. D.

Dr. Sanford J. Engle (A. M. C., '79), of Susquehanna, Pa., died February 1, 1899, at Binghamton, N. Y., of Bright's disease. He is survived by a wife and one son, aged about twelve years.

After graduation, he located at Jackson, Pa., where he had a large county practice. In November, 1893, he removed to Susquehanna to escape the severe strain of the long rides. Here he very soon acquired a fine practice and at the time of his death was one of the leading physicians of Susquehanna.

T. B. VAN ALSTYNE.

Medical News

Edited by H. Judson Lipes, M. D.

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE.—A meeting of the Executive Committee was held in the College Library, February 8, 1889, the President, Dr. Willis G. Tucker, in the chair. The important business of the meeting was the arrangement for the annual meeting of the Association. The special committee appointed to consider a new method of election of officers of the Association submitted their report, as follows:

"It is recommended that the Executive Committee appoint a sub-committee of five members to make nominations for the various offices of the Association, selecting as many candidates for each office as seems advisable; that these nominations be printed upon a so-called blanket ballot, which shall contain also space for the insertion of other names than those selected, for the convenience of the voter; that the ballots be printed and distributed by the Corresponding Secretary with the announcements for the annual meeting, with arrangements for the transmission and receipt of the ballots by mail, and that the committee to be appointed in conformity with this recommendation be given power by the Executive Committee to arrange for the details of this method of balloting and election so that it may correspond with the provisions of the Constitution of the Association."

The report was received, generally discussed, and a motion for its adoption was lost.

The following committees were appointed by the President:

On Class Re-unions: Drs. MacFarlane, Bendell and Richardson.

On Alumni Dinner: The President, Drs. Vander Veer and Nellis.

On Entertainment of Visiting Alumni: Dr. MacFarlane, The President and Dr. Van Allen.

Reception Committee: Drs. Babcock, Mereness, Cook, Sabin, Root, Lewi, Washburne and Happel.

The Treasurer, Dr. Van Allen, reported that the law suit against the Association had terminated favorably to the Association.

The President, with the approval of the committee, announced officially the date of the next annual meeting of the Association as April 19, 1899, and after the transaction of routine business, the committee adjourned.

ALBANY COUNTY MEDICAL SOCIETY.—The fourth intervening meeting of the Medical Society of the County of Albany was held on Wednesday evening, January 25th, at the City Hall, Cohoes, N. Y. A large delegation from Albany and Watervliet were present and were most delightfully entertained by the members in Cohoes. President J. L. Archambault, M. D., welcomed the guests for the physicians of Cohoes, and Mayor J. H. Mitchell for the city. After the reading of the minutes of the last

meeting, a motion was made and seconded that a message of sympathy and expression of hopes for a speedy recovery be sent to Dr. C. E. Whitbeck, who was then seriously ill. Dr. James D. Featherstonhaugh presented a memorial of Dr. William F. Carter, and a committee was appointed by the President to arrange for placing the memorial in Alumni Hall.

Dr. Featherstonhaugh then read his paper on "Water Supply." The discussion was opened by Dr. J. H. Mitchell, and followed by Drs. Neuman, Blumer, Hailes, and others. The next paper was read by the President, on "A Typhoid Temperature Followed Five Months Later in the Same Subject by a Rather Similar Chart." Discussion opened by Dr. Blumer, and followed by Drs. Van Vranken, Happel, Ward, and others.

After the adjournment of the meeting, a repast was served in the Mayor's office.

A regular meeting was held on Wednesday evening, February 22, 1899, in Alumni Hall. In the absence of both the President and Vice-President, Dr. C. S. Merrill was called to the chair. After the reading of the minutes, Dr. Neuman announced, for the committee appointed to consider the recommendations contained in the President's address, that the committee had examined the lists of physicians located in the city of Albany, and found that but few were not duly registered. Dr. Van Rensselaer then read a paper on "The Etiology and Pathology of Tuberculosis." Dr. Hun opened the discussion and was followed by Dr. Blumer. In the absence of Dr. Archambault, Dr. Vander Veer read his paper, "A Report of Two Operative Cases of Appendicitis." Dr. Macdonald opened the discussion, which was closed by Dr. Vander Veer. At the close of the meeting a lunch was served in the College Library.

The following program for future meetings has been published:

March 8.—"Tuberculosis of the Bones and Joints," S. R. Morrow, M. D.; "Tuberculosis of the Skin," F. C. Curtis, M. D.; "Tuberculosis in Children," William H. Happel, M. D.

March 22.—"Tuberculosis of the Female Organs of Generation," A. Vander Veer, M. D.; "Tuberculosis of the Urinary Tract," W. G. Macdonald, M. D.; "Tuberculosis of the Male Genitalia," J. D. Craig, M. D.

April 5.—"The Clinical Aspects of Chronic Pulmonary Tuberculosis," S. B. Ward, M. D.; "Some Facts Regarding the Associated Infections in Tuberculosis," A. J. Lartigau, M. D.; "Tuberculosis of the Pharynx," C. L. Theisen, M. D.

April 9.—"Bovine Tuberculosis in its Relation to Man," E. Moore, M. R. C. V. S.; "Tubercular Meningitis," A. MacFarlane, M. D.; "An Analysis of the Gastric Symptoms of Pulmonary Tuberculosis," L. H. Neuman, M. D.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The ninety-third annual meeting of the Medical Society of the State of New York was held at Albany, January 31 and February 1 and 2, 1899. The meeting

was called to order by the President, John O. Roe, M. D., of Rochester. After the opening prayer by the Rev. Mr. Sylvester, the President delivered his inaugural address.

The Committees on Hygiene and Prize Essays then gave their reports, the latter stating that no essays had been presented and recommended that the money available be held over for three or four years until the amount might be sufficient to stimulate competition.

The following Nominating Committee was chosen by the district delegations: Drs. J. B. Ransom, Wendell C. Phillips, William Browning, H. Bendell Eugene Beach, O. C. Eastman, Edward Meany, M. P. Conway and Ernest Wende. The officers for the ensuing year were later elected, as follows: President, Dr. Willis G. Macdonald, of Albany; Vice-President, Dr. John Gerin, of Auburn; Secretary, Dr. Frederick C. Curtis, of Albany; Treasurer, Dr. Charles H. Porter, of Albany.

Dr. W. W. Keen, of Philadelphia, and Dr. Morris H. Richardson, of Boston, were recommended for honorary membership; while Drs. John B. Deaver, of Philadelphia; Joseph Eastman, of Indianapolis, and William Osler, of Baltimore, were announced as eligible for honorary membership.

BANQUET OF THE PHI SIGMA KAPPA FRATERNITY.—The tenth annual banquet of the Beta Chapter of this fraternity, connected with the Albany Medical College, was held on the evening of February first. Many old members who were attending the State Medical Society meeting were present. Dr. W. C. Cuthbert, of Sandy Hill, acted as toastmaster. Many toasts were responded to by past and present members.

THE DEATH OF SIR JAMES MOUAT.—The death, at the age of eighty-three years, of Surgeon-General Sir James Mouat, K. C. B., V. C., honorary surgeon to Queen Victoria, and a distinguished British military medical officer, has been lately announced in the *British Medical Journal* for January fourteenth.

MT. SINAI HOSPITAL, NEW YORK.—The site for the new structure cost \$387,000, and the buildings will cost over \$600,000. One of the features of this hospital will be the large detached building, which will front on Fifth avenue and will be devoted exclusively to pay patients.

CHRISTIAN SCIENCE IN CHICAGO.—There has lately been subscribed \$20,000 for two new temples, one for the North Side and the other for the West Side congregations. A year ago a third temple was dedicated on Drexel Boulevard.

THE AMERICAN NEUROLOGICAL ASSOCIATION.—Atlantic City, N. J., has been chosen as the place for the next meeting of the American Neurological Association, which will be held June 14, 15 and 16, 1899. Dr. J. Hendrie Lloyd, of Philadelphia, is President, and Dr. G. M. Hammond, of New York, Secretary and Treasurer.

THE AMERICAN ORTHOPEDIC ASSOCIATION.—The thirteenth annual meeting of this association will be held at the New York Academy of Medicine, May 31 and June 1 and 2, 1899. Dr. W. R. Townsend, of New York, is President, and Dr. John Ridlon, of Chicago, Secretary.

THE INTERNATIONAL MEDICAL MAGAZINE.—E. B. Treat & Co., of New York, announce that they have assumed the business management of the *International Medical Magazine*. Dr. Boardman Reed, of Philadelphia, will continue to be Editor-in-Chief.

DEATH OF CHARLES FAYETTE TAYLOR, M. D.—The death of Dr. Taylor, at Los Angeles, Cal., on January twenty-fifth, from pneumonia complicating grip, has been announced. Dr. Taylor has been an invalid for fifteen years. He was borne in Williston, Vt., April 25, 1827. He was graduated from the University of Vermont in 1856, and soon after located in New York city, devoting himself mainly to deformities. It is chiefly due to his untiring energy and faithful services that the New York Orthopedic Dispensary and Hospital was established. He was eminent as an orthopedic surgeon, and invented a number of valuable surgical appliances.

GEORGE H. ROHÉ, M. D.—Dr. Rohé, Superintendent of the Maryland State Insane Asylum, and an expert in diseases of the mind, died suddenly of heart disease, in New Orleans, February seventh. Dr. Rohé was Health Commissioner of Baltimore for some years, and later was connected with the Spring Grove Insane Hospital, which position he resigned, about three years ago, to take charge of work connected with the founding of the new State Hospital at Sykesville. Dr. Rohé was an energetic man, and is the author of books on Hygiene and on Dermatology, which have been well received. He has also been prominent in gynæcology, especially in his advocacy of certain operations for the relief of insanity. He attended the New York State Medical Society meeting, in 1894, and was elected to honorary membership in 1895. Dr. Rohé was only forty-five years of age, and left a wife and daughter.

HEALTH OF TROOPS AT MANILA.—On February second, General Otis reported as follows: Death among troops in Philippines since arrival to February first (seven months), 220, of which 41 were due to wounds and accidents. Of the remaining 179, 65 died of typhoid, 43 of small-pox, 22 of dysentery, 8 of malarial fever. The remaining deaths were due to many various diseases. Small-pox causes apprehension. The entire command has been vaccinated several times. Twelve physicians have been engaged several weeks in vaccinating natives. The more sickly season is during the hot months,—March, April, May,—when fever, small-pox and dysentery are more prevalent. Nine per cent. of the command are now reported sick. A great majority of the cases are slight ailments.

AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION.—The fifty-fifth annual meeting of this association will be held in New York, May 23, 24, 25 and 26, 1899. The headquarters of the association will be the Waldorf-Astoria. For the convenience of the President and Council, it is requested that those desiring to be admitted to active or associate membership should make application before March twenty-third, in order to be acted upon at the next meeting. It is particularly requested that those who purpose reading papers, notify the Secretary of this intention at once and send to him as soon as possible the titles of papers.

The Executive Committee suggests several delightful entertainments, which, if time permits, will be arranged for.

Among the papers already promised, we find one on "The Boarding-Out Treatment of the Insane in America," by Dr. G. Alder Blumer, of Utica, N. Y.

INTERNATIONAL CONGRESS AGAINST THE ABUSE OF ALCOHOLIC LIQUORS.—The seventh meeting of this Congress is to be held in Paris, the 4th to 9th of April, 1899. The preliminary program gives promise of the widest discussion of this topic ever made at any one gathering. Nearly every aspect or phase of alcoholic injury and loss is treated by persons familiar and able to discuss. The morning sessions are to be confined to scientific studies; the afternoon meetings are to be open for educational, moral and sociological studies of the drink problem. The evenings will be open for the discussion of special topics by leaders and specialists. It is proposed to have representatives of every society and organization for temperance in the world, and, if possible, arouse a new interest in this topic, which is fast becoming the great theme of civilization. Short papers are earnestly solicited, on any one phase of the subject, from American workers in the field. All letters should be addressed to the American Chairman of Organization, T. D. Crothers, M. D., Hartford, Conn.

PERSONAL.—Dr. Eugene Hanratta (A. M. C., '97) has been appointed City Physician of Watervliet.

Dr. E. H. Goodfellow (A. M. C., '94) and Dr. C. M. Lefler (A. M. C.) have been elected to the office of City Physicians in Gloversville.

Dr. Edward J. Parish (A. M. C., '96) is now Assistant Surgeon of the New York Orthopedic Hospital and Dispensary.

Dr. William Osler, of Baltimore, addressed the students of the Albany Medical College at noon, on Wednesday, February first.

Surgeon-Major C. E. Davis, of the First New York Volunteers, has recently returned from Honolulu, where he remained on duty in charge of the Division Hospital after the return of his regiment.

Book Reviews

Electricity in the Diagnosis and Treatment of Diseases of the Nose, Throat and Ear. By W. SCHEPPEGRELL, A. M., M. D., New Orleans, La. With 161 illustrations and 403 pages. G. P. Putnam's Sons, New York, publishers, 1898.

The well-known author is to be congratulated on having given the profession the best and, in fact, the *only* complete work on the application of electricity in the diagnosis and treatment of diseases of the nose, throat and ear, that has appeared up to the present time. The subject has been well systematized. In the opening chapters, the general principles of electricity are considered and the different forms classified, with a description of the best batteries, rheostats, meters and dynamos. In the following chapters, the method of applying galvanism, the use of the faradic coil, the static induced and sinusoidal currents are described. The article devoted to ozena is very interesting, and the method of treatment by cupric electrolysis given considerable attention. The chapters on transillumination, direct laryngoscopy, massage in otolaryngology, tumors of the nose and throat, electrolysis, cataphoresis, neuroses of the larynx and those devoted to the application of electricity to the ear, are particularly good. X-rays and X-rays in otolaryngology are the subjects of interesting articles, and mention is made of the possible therapeutic value of the rays in tuberculosis and particularly lupus of the nose. The author quotes two cases successfully treated in this way by Hicquet. In the chapter on malignant tumors of the nose and throat, the author gives a thorough *résumé* of their treatment by the electrocautery (electro-cautery knife), and electrolysis. The treatment by electrolysis, while not as commonly employed as other methods, would seem to open up an interesting operative field in these cases, with some chance of success where the malignant growth is limited and where there is little glandular involvement. The author reports a most gratifying result in the case of an epithelioma of the base of the tongue, for which zinc electrolysis was used. In three weeks it had almost entirely disappeared.

The bibliographical references are very complete and the illustrations very good.

Without entering into a discussion of any other particular part of the work, it may be said that the author's views are very conservative and undue importance has not been given to the treatment of diseases of the nose, throat and ear by electrical methods alone.

The book is certainly invaluable to every physician interested in nose and throat work, and would be a valuable addition to any medical library.

C. F. THEISEN.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

The New Local Anæsthetic, Nirvanin.—LUXENBERGER (*Münchener Medicinische Wochenschrift*, January 3 and 10, 1899) recounts his experience with the new local anæsthetic, Nirvanin, discovered by Einhorn and Heinz.

The duration of the anæsthesia, which is equal to cocaine anæsthesia, varies with the strength of the drug; a 1-10 per cent. solution anæsthetizes for five minutes; a 1-4 per cent. for fourteen minutes; a 1 per cent. for twenty minutes. In surgical work for skin work and removal of non-inflammatory tumors, he used mainly a 1-5 per cent. solution. For work about vessels (varices, etc.), neuromata and work about joints and fasciæ or about periosteum, 1-4 per cent. was used. The 1-4 per cent. solution was also used about very sensitive skin surfaces, as the nose, lips, ear and chin. In inflammatory conditions stronger solutions, preferably 1-2 per cent., must be used.

The author's experience consisted in many small operations (lasting ten to thirty minutes) and some large ones (laparotomy, amputations, etc.), and in practically all cases he was able to work with comfort and without unfavorable results. The substance was also used with great success in extracting teeth. As compared with cocaine, Nirvanin has the following advantages:

1. It does not irritate the wounds; they heal perfectly normally.
2. The after pain, so common after cocaine operations, is slight or even absent.
3. Nirvanin has antiseptic properties. Bacteria do not develop in a 1 per cent. solution. The ordinary pus cocci do not grow on gelatin to which 1-2 per cent. Nirvanin has been added.
4. The Nirvanin solutions can be sterilized by heat without losing their anæsthetic power.
5. Nirvanin does not possess the toxic power of cocaine and can, therefore, be used in much larger quantities. Even with very weak cocaine solutions (Schleich's solutions) the author has seen unpleasant results from cocaine. In one case there was a three hours' collapse after injection of .03 grammes of cocaine in a strong man. With Nirvanin, he has not had any unpleasant effects of this kind, even when much larger quantities were used.

The Operative Diminution of a Nose (Rhinomiosis).—In the issue of the *Berliner Klinische Wochenschrift* for the 3d of October, 1898, JACQUES JOSEPH, of Berlin, has an article with this title. He calls it a new method in rhinoplasty. A single case is reported, in which the object was not to remove any morbid condition, but to reduce the size of a perfectly healthy nose.

In January, 1898, a twenty-eight-year-old man presented himself, declaring that he was becoming melancholy, because, aware that fun was being made of his very large, prominent nose, that he had gotten to avoid company and felt the strongest desire to be freed from the remarkable appearance of his nose. Dr. Joseph found that the patient was really depressed, and since the doctor believed that there was no other way in which the patient could be helped, except operative means, he consented to do the operation. Before the operation: (1.) The nose was too long; its point came down too low. (2.) It stood out too far from the face and the nostrils were, on that account, very large. (3.) It had an unsightly hump.

After the operation the nose is: (1.) Rather too short than too long. (2.) It is normal in its projection from the face and, on this account, the nostrils are notably smaller than they were. (3.) The hump is done away with and the nose is straight.

The author gives some figures: Before the operation the length of the nose, from its root to the most distant point of the tip, was six and one-half centimeters, and the distance of the most anterior point of the tip from the most posterior part of the naso-labial fold was four and one-half centimeters. The operation reduced each of these dimensions one centimeter.

The acts of the operation were: (1.) The removal of those parts of the integument which should be superfluous for the future nose and a reduction in size of the nostrils. (2.) The elimination of the bony and cartilaginous parts of the roof of the nose, in so far as these parts were superfluous. (3.) The shortening of the septum with the purpose of raising the tip of the nose.

1 Act. From the median line at root of nose two straight, diverging lines were drawn to the nostrils. Each above went in the triangular cartilage down to the nasal bone; its lower end, however, was carried through the entire thickness of the ala nasi; likewise through the alæ nasi were carried two incisions, each beginning, below, about one-half centimeter nearer the median line than the lower end of the cuts just described; leaving the nose-tip intact, these latter incisions converged upward, meeting at a point about one and one-half centimeters above the nose-tip. The bit of integument which these four incisions surrounded, and which was shaped like an isosceles triangle with two downward projections, was removed from the underlying tissues.

2 Act. This act removed the superfluous bony and cartilaginous parts of the roof of the nose. A strip of remaining skin was loosened about a centimeter, on each side. Then a chisel was placed on the nasal bones, in succession, pointed in the direction the front of the future nose was to have and, with a few strokes, the parts of these bones, in front of this line, were removed. The septum was cut off to the same extent; in this way a fissure, open upward, was made. In this a knife was introduced and all the superfluous anterior projection of the nose, including its hump, was cut away. Thus both nasal canals were opened longitudinally, though only as narrow slits, in appearance.

3 Act. This consisted in cutting out a wedge-shaped piece of the lower part of the septum, of which the apex was posterior, whose upper incision went through the quadrangular cartilage, the lower through the membranæum.

This finished the operation proper; the suture came next. First the edges of the wedge-shaped (3d act) wound in the septum were united by suture; then, beginning at the root of the nose, the edges of the integumentary wound. Thus the skin suture was shaped like an inverted Y.

The operation lasted a little more than an hour. The wound healed by first intention and on the thirteenth day after the operation the patient was dismissed. No annoying sequelæ had yet been discovered when this report was made. The scars were thread-like and unnoticeable. The patient has gotten all over his downheartedness. His wife said that he liked to go out in company after the healing; in a word, he was happy over the result of the operation.

The author could not find any reports in literature of similar operations.

Dr. Rosenstirn, of San Francisco, thought he had known of a similar one having been performed in America. The author and he investigated the literature and found in the *New York Medical Journal* for 1892, page 452, the report of a somewhat similar operation having been performed by Dr. Robert Weir, of New York. Dr. Joseph reports, however, that Dr. Weir's patient merely exchanged a too prominent nose for a too long one. He says that the operation by Dr. Weir and that done by himself were similar as to their indications and beginnings, but that Dr. Weir's was a case of rhinomiosis totalis and that they differ in the facts that Dr. Weir did four operations with the not altogether satisfying result, above reported, of the patient trading one bad kind of nose for another bad kind, while Dr. Joseph did a single operation with whose result the patient, likewise everyone else concerned, was entirely satisfied.

Catheters and Cystitis.— R. N. MAYFIELD (*New York Medical Journal*, September 3, 1898) presents a catheter that is reliable and efficient in operation when the use of a catheter is indicated in all conditions and diseases of the bladder. In this instrument the danger of clogging or failure to perform its functions is obviated, and its interior may be readily made aseptic, and bits of mucus that usually clog an ordinary catheter may be readily drawn off. It is of very simple construction, being tubular, with the curve of an ordinary instrument, and opened at the end for an inlet. For the closure of this open end, and for the easy insertion of the catheter, as well as for other purposes, a bulbous or rounded head is used, preferably solid, and attached to one end of a wire, passing through the body or tube and projecting at its rear or outlet end.

This construction forms a very efficient catheter having an area of opening so large as to greatly obviate the danger of clogging, for if mucus should lodge against the open end, the working of the head back and forth upon its seat would cut away the obstructing bits of mucus

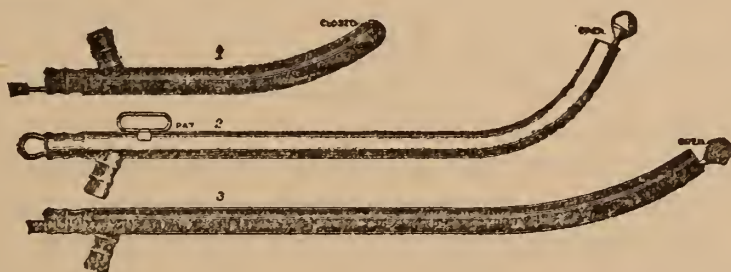
and permit them to pass through the tube. With this instrument there should be no hesitancy in using nitrate of silver, iodine, corrosive sublimate, carbolic acid or hydrogen solutions in the bladder, as any of these solutions can be readily drawn off or neutralized, thus preventing poisoning from absorption, or preventing rupture from gases that form in the bladder.

Regarding the treatment of cystitis with the employment of this catheter, presuming that we have a typical case, with ropy, viscid and tenacious mucus, the membrane thickened and possibly ulcerated, and in deep folds — “ribbed,” as it were — the treatment is begun as follows:

1. Inject a quarter of a grain of cocaine dissolved in a drachm of water into the membranous portion of the urethra.

2. Anoint the largest hard-rubber catheter that can be well passed into the bladder, and increase the size one number each week until the urethra is normal in size.

3. Begin with dilute hydrogen solutions — preferably hydrozone — one party to twenty of lukewarm water, using this solution freely, especially



when employing the large size catheter. If the small size is used at the beginning, use only two or three ounces at a time until removed by the return flow. This can be repeated until the return flow is clear and not “foaming,” which indicates that the bladder is aseptic.

4. Partly fill the bladder with the following solution: Tincture of iodine compound, two drachms; chlorate of potassium, half a drachm; chloride of sodium, two drachms; warm water, eight ounces. Let it remain a minute or so and then remove. This treatment should be used once or twice a day.

When extensive ulceration is suspected, the use of from ten to twenty grains of nitrate of silver to the ounce, once a week, is recommended to be neutralized with chloride of sodium solutions. This treatment carried out carefully will be satisfactory, as there is no remedy that will destroy bacteria, foetid mucus, or sacculated calcareous deposits like hydrogen.

Injuries to the Kidneys and Their Treatment.—HOHLBECK reports (*St. Peters. med. Woch.*, 1898, No. 51) that in the last eight years fourteen cases of injury to the kidneys have been treated in the surgical division of the city hospital at Riga. Twelve of these were internal injuries and two were due to puncturing wounds. Of the subcutaneous injuries, three were caused by indirect violence—fall from a height—and nine followed direct blows and from being run over. The symptoms of these

injuries may be considered as general, local and remote. The general symptoms include nausea, vomiting, hiccough, shock and anæmia; the local, pain, ecchymoses in the lumbar region and hæmatoma; and under the remote symptoms may be included hæmaturia, ecchymoses in the inguinal and scrotal regions and inner surfaces of the thighs, and radiating pains in the testicles, at the root of the penis and in the perineum. The initial pain in the region of the kidney is the most constant symptom in the internal injuries, and is to be found almost invariably. This may last for from fourteen to twenty days. The writer has not observed in his cases the radiating pains in the thighs, perineum and testicles, with retraction of the latter, which many authors have emphasized as important symptoms in this class of injuries. Next to the initial lumbar pain hæmorrhage in one form or another is the most important symptom. This may manifest itself in three ways: A perirenal hæmatoma, hæmaturia or by an effusion of blood into the peritoneal cavity. Generally the effusion of blood is to be determined by the hæmaturia alone. Edler believes this symptom to occur in 76 per cent. of the cases. The most important complications are renal and cystic colic, due to plugging of either the ureter or the urethra. Reflex oliguria occurs in almost all cases. Of Hohlbeck's twelve cases, three terminated fatally, and in these there were severe complications — rupture of the spleen, fracture of the leg and of the humerus and ribs, and rupture of the liver, respectively. The two cases of punctured wound recovered nicely. In no case was suppuration seen. The prognosis thus depends in great measure upon the complications. Küster records a mortality of 91 per cent. in complicated cases, and only 30 per cent. in the uncomplicated. Punctured wounds also give a more favorable outlook than the internal injuries to the kidneys.

All of Hohlbeck's cases were treated on an expectant basis. Absolute rest in bed, often for from three to four weeks, was held to be imperative, and in one case a recurrence of hæmorrhage followed an indiscreet movement to the upright position by the patient. The trunk was bound in a wide binder, over which a rubber bandage was placed. Ice was applied to the region of the kidneys; a strictly limited diet was enforced, which included milk and alkaline drinks. Hæmostatics are also indicated, as is morphine at times. In case suppuration is noticed, operative treatment must be undertaken at once.

MEDICINE

Edited by Samuel B. Ward, M. D.

The Ætiology of Yellow Fever.—ARCHINARD, WOODSON and ARCHINARD (*New York Medical Journal*, 28 January, 1899) report the results of their bacteriological studies of the epidemic of yellow fever which occurred in New Orleans in the summer and fall of 1897. Their work included (1) a search for an isolation of the specific germ of yellow fever in the cadavers of yellow fever patients, in the blood of the sick and in their excretions; (2), results of animal inoculations; (3), comparative

tests between *Bacillus Sanarelli* and the bacilli A and B isolated by the writers; and (4), serum reactions with *Bacillus icteroides* and their bacilli A and B.

The character of the bacillus described by the authors is given as follows: A short thick rod measuring from two to four micromillemetres in length by about half the breadth, showing in different media marked pleomorphism; it is very motile, as much so as the *Bacillus typhosus*. It has end flagella very much like this bacillus, stains well in all watery solutions of basic aniline dyes, unstains by Gram's method. It is aërobic — *i. e.*, it grows best in ordinary atmosphere — but is facultative anaërobic, *i. e.*, grows when deprived of oxygen and in the presence of hydrogen. It grows readily in all known neutral or weakly alkaline media, both solid and fluid; it produces very slowly, or not at all, acidity in these media; it grows best at 37° C., but grows also, though more slowly, at ordinary laboratory temperature from 18° to 22° C. In peptone bouillon it grows fairly well, but best in lactose bouillon generally, but occasionally produces no fermentation in this medium; in glucose bouillon it produces marked fermentation; in milk it grows readily without producing coagulation even after weeks; in litmus milk it causes a slight acidity, but only very slowly; in Dunham's solution it produces no indol, even after the addition of nitrites, but does so after the addition of an acid; on potatoes it produces a whitish-yellow transparent growth; on blood serum it grows readily, but shows nothing characteristic; on the surface of gelatin it grows readily, showing a whitish transparent growth; on gelatin plates the individual colonies show under the low power of microscope as a gray or yellowish-gray rounded form, iridescent and often containing a nucleus which may be central, but is at times peripheral; this nucleus is generally darker than the rest of the colony and is surrounded by a light halo; in stick culture it grows all along the stab, but more luxuriantly at the surface. It does not liquefy gelatin. On the surface of agar its growth is almost transparent when young. As it grows older it gets whiter. Older colonies at the bottom of the tubes, near the water of condensation, show marked raised points, darker than the rest of the growth, which resemble nuclei. The characteristic growth described by Sanarelli in old cultures of his *Bacillus icteroides* in agar, when growing partly in and partly out of the incubator, has been observed. It is typically agglutinated by the blood of yellow fever patients or of persons who have recently had yellow fever. Inoculated in animals, guinea-pigs and rabbits, it gives rise to typical symptoms, and when inoculated in sufficient quantity causes death, and sometimes very quickly. The pathological lesions found are characteristic, and it is found in the blood and organs of animals dying from its effect, and can be recovered from these in pure cultures.

The authors give the following conclusions:

1. In a large proportion of autopsies (thirty-two times in thirty-nine) of yellow fever cases of 1897, in New Orleans, a bacillus was found either in a pure state (twice) or in association (thirty times), similar to the

Sanarelli *Bacillus icteroides*. This bacillus has some points in common with the *coli communis*, but differs from it in some of its essential characteristics.

2. In live blood taken from the veins of the elbow, in well-marked cases of yellow fever, this bacillus was isolated four times in five cases.

3. In the exhaled breath mixed up with secretions from the mouth and nose (sometimes bloody) it was isolated twice in twelve cases.

4. In the scrapings of the surface of the body of the sick, principally face, neck, upper part of thorax, the bacillus was isolated twice in every twelve cases.

5. The bacillus injected intravenously to the rabbit, and subcutaneously to the guinea-pig, in large doses, from five to ten cubic centimetres of a bacillus culture, is always fatal, and sometimes very quickly. In smaller doses (one to two cubic centimetres) the animals are made sick, but generally recover. The animals that die show characteristic lesions of the liver, kidney and stomach. Cultures from these organs give pure growths of the inoculated bacillus.

6. The bacillus is identical in almost every respect with Sanarelli's *Bacillus icteroides* obtained from himself, and from Dr. Sternberg, but differs somewhat in its cultural aspects from Sanarelli's description of his bacillus.

7. The blood of yellow fever cases or of recent convalescents from this disease agglutinates the *Bacillus icteroides* of Sanarelli, and also the bacillus of the New Orleans investigators in over eighty per cent of the cases in the proportion of one part of serum for forty of culture within one hour. In less than twenty per cent the reaction does not take place.

8. The blood of typhoid and dengue with eruption and malarial fever when properly diluted, one to forty, does not agglutinate the *Bacillus icteroides* or this bacillus except in exceptional instances.

9. The blood from a number of diseases other than yellow fever when properly diluted, one to forty, does not react on the *Bacillus icteroides* or the bacillus described as occurring in the cases of the New Orleans epidemic.

10. Normal blood properly diluted, one to forty, does not agglutinate the *Bacillus icteroides* or the New Orleans bacillus.

11. The blood of persons who have had yellow fever seems to retain its agglutinative power for a number of years. The great majority of the cases tested who had had yellow fever in 1878 gave the reaction. Those who had had yellow fever previous to 1878 gave a blood which possessed no agglutinative power with either Sanarelli's or the New Orleans bacillus.

Yellow Fever Serum.—The *Gazz. degli aspedali*, 1898, No 43, gives a report of the experience of Sanarelli with the yellow fever serum. This serum was taken from horses rendered immune for twelve to fourteen months, and had always experimentally proved curative and preventive in guinea-pigs. The serum is efficacious against the bacteria and not

against the toxins. It is of no value as soon as the toxin affects the kidneys and nervous system. Anuria and continuous delirium are, therefore, contra-indications, and the treatment should begin not later than the third day. A characteristic result of the injection is the true polyuria which occurs.

After the injection of even small doses, 15 C. C., there appear a slight hyperæmia of the skin, especially the chest and face, the conjunctivæ are injected, the pulse stronger and slower, feeling of heat in the head, tendency to cough and vomit and a slight urticaria. A few hours later there is a reactive fever which, in the majority of cases, leads to a permanent fall in temperature and improvement. In some cases repeated injections are necessary and in severe cases directly into the veins. Often 100 C. C., in doses of 20 C. C., were injected. Of twenty-two cases treated, five died.

The prophylactic results are even more brilliant. The disease broke out in a prison where the hygienic conditions were not good and carried off one after another. But from the moment the prisoners were injected the disease disappeared. Further investigations will be necessary to determine the duration of this immunity.

Septicæmia Treated by Blood-Letting and Infusion of Salt Solution, with Report of a Case.—YOUNG, in the *Maryland Medical Journal*, November 19, 1898, gives a most interesting account of a case of appendicitis. The patient was a boy of fifteen, who had suffered from repeated mild attacks of appendicitis. Last June he had another attack, which did not yield, and five days later was operated upon by Halstead at 3 A. M. On the night following the operation his temperature was 103°, pulse 118. He was restless, constantly vomited small amounts of fluid and his abdomen was distended and tense. His pulse grew steadily worse, reaching, the following afternoon, 170, in spite of hypodermic injections of one-sixtieth of a grain of strychnia every hour. Then 700 C. C. salt solution was injected under the right breast. The patient continued very thirsty and vomited incessantly. At 7 in the evening the temperature was 105.8°, pulse 160, and the patient rapidly grew weaker, but with no signs of general peritonitis. A large aspirator needle was inserted under cocaine into the right basilic vein and a small quantity of blood flowed out. Then 1300 C. C. salt solution were very slowly injected. At the end of the transfusion his temperature was 104° and pulse 130. The improvement continued for several hours and the pulse again became very weak. Twelve hours later 2500 C. C. were injected and had the effect of completely washing the blood infection. Temperature and pulse both dropped almost to normal and afterwards there was never any danger. Examination of the wound showed that the infection had traveled up the abdominal incision and caused a slough of the rectus muscle for five or six inches. The convalescence was tedious, but uneventful. The writer believes that in a case of severe septicæmia in an adult 7000 C. C. or more of salt solution should be injected, as the curative effect is

probably due both to the dilution of the poison and its rapid elimination by the excretory organs.

The subcutaneous methods are probably adequate for cases not urgent, but for others, direct infusion into a blood-vessel is more certain. As the intravenous method is not without danger, Dr. Halstead, in 1884, advocated centripetal arterial transfusion into the radial as devoid of danger. The toxic states of typhoid, pneumonia, diphtheria and malaria would seem to come within the province of this line of treatment.

The Medical Treatment of Appendicitis.—**ALLYN**, in the *Therapeutic Gazette*, January, 1899, advocates a simple plan of treatment. The patient is kept absolutely quiet; also food is withheld for twenty-four to forty-eight hours and water allowed sparingly. A laxative, as a drachm of Epsom salts in peppermint water, is administered every three hours until one or two movements are obtained in twenty-four hours. When Epsom salts could not be retained, then calomel, in divided doses, was given until the same results were obtained. No opium was given for the pain. In nearly every instance pain subsided when once the bowels had been freely moved and food abstained from. In rare instances cordial was given after the bowels had been moved, but the writer is not certain that the patient was any better for it.

Food was returned to very cautiously. Locally, turpentine stupes, hot applications, ice and leeches were applied. The objection to opiates is that they mask the symptoms and aggravate any toxæmia that may be present.

The great objection to the use of laxatives is that the peristalsis occasioned may induce perforation of the inflamed appendix and general peritonitis. This danger, the writer believes, has been much exaggerated. Appendicitis, in most instances, is a part of a catarrh of the colon or due to fecal accumulation therein. The overdistended appendix will empty itself most readily if the colon is itself empty or nearly so. The symptoms, nausea, vomiting, temporary fever and chills, are usually toxic symptoms, and they are lessened by the elimination of the toxins. Purgation is not necessary. If the bowels are at first constipated, an enema should be given, then a laxative, until they are freely moved. The author does not decry the services of the surgeon, but believes that many cases are surgical from the very beginning, or at least doubtful. He regards those as doubtful where, after the bowels have been sufficiently moved, the symptoms do not show decided improvement. His success in thus treating fifteen cases of appendicitis during the last three years leads him to recommend it to others.

ALBANY

MEDICAL ANNALS

Original Communications

HYGIENIC CAMPS.*

By HENRY R. HOPKINS, M. D.,

Buffalo, N. Y.

In the war of the Crimea with 1,460,500 troops, there were killed in battle 53,870; died of wounds, 66,600; died of disease, 492,200. In the American war of 1861-5, in the northern army, there took the field 2,336,000 troops, there were killed in battle 44,240; there died of wounds, 34,006; there died from disease, 149,240.

In the American-Spanish war there took the field 274,717 troops; there were killed in battle, 293; there were wounded, 1,577; there died from disease, 2,619.†

In the American war of 1861-5, there died from camp diseases, diarrhoea, dysentery and camp fevers, 85,214.

The report of the United States commissioner of pensions in 1898 shows upon the pension roll 993,714. The United States government has disbursed for pensions since the war of 1865, \$2,327,525,237. In 1880 the bacillus of typhoid fever was discovered by Eberth. In the same year Sternberg discovered the pneumococcus of pneumonia. In 1882 Koch discovered the bacillus of

* Read before the Medical Society of the State of New York, January 31, 1899.

† The authorities at Washington, under date of March 10, 1899, gave the complete death-roll of this war as follows: The Army—Killed in action, 329; died of wounds, 125; died of diseases, 5,277. The Navy—Killed in action, 17; died of wounds, 1; died of diseases, 0.

tuberculosis, in 1884 the bacillus of cholera. In the same year Loeffler discovered the bacillus of diphtheria. In 1892 Canon and Pfeiffer discovered the bacillus of influenza and the supposed bacillus of measles.

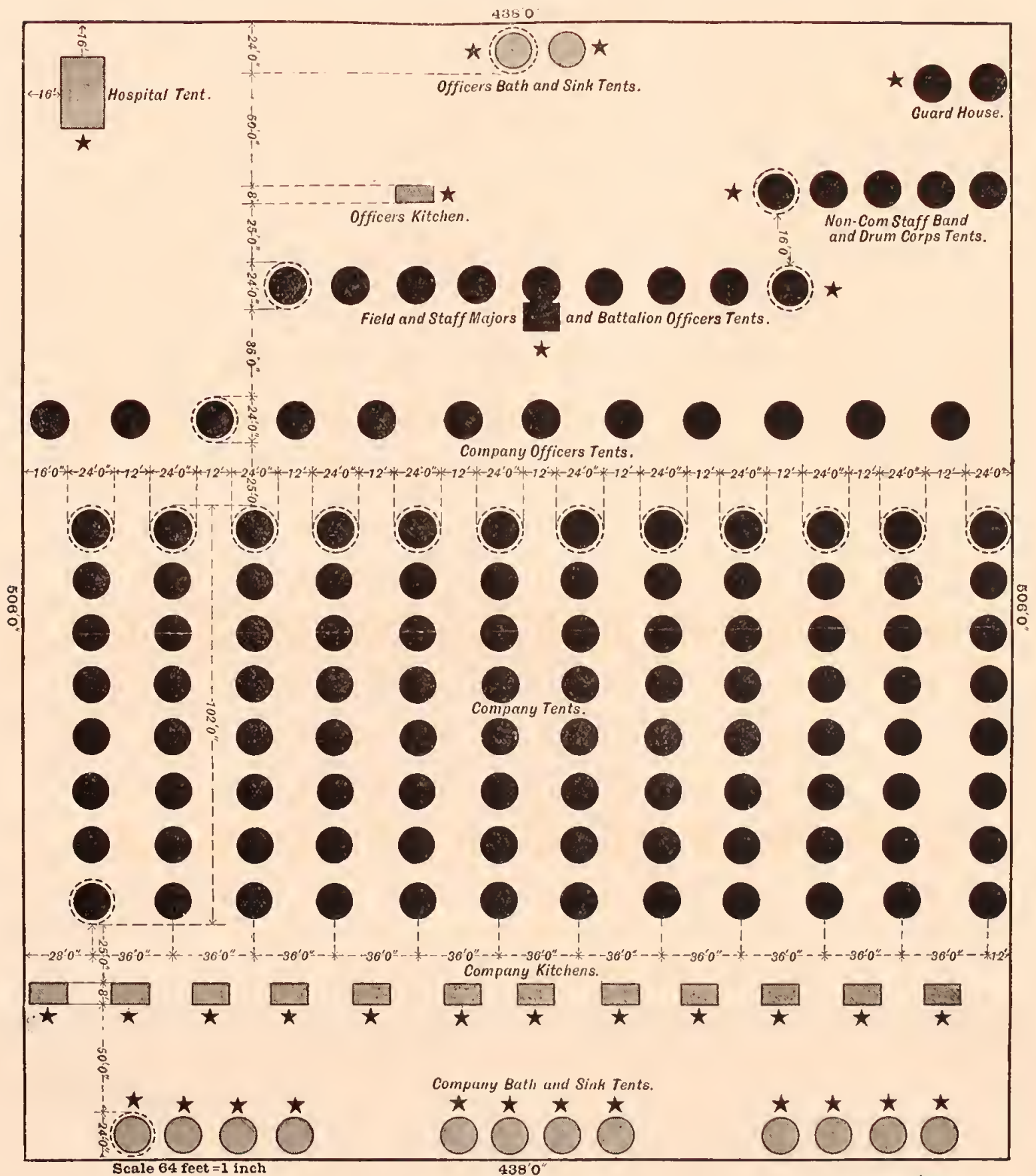
It is the common knowledge of all informed men that from the earliest times the fatality attending camp life is far in excess of that attending the march or line of battle. There has been no exception to this experience. If it were not that there has come into the minds of sanitarians within the last thirty years something which is important and new, there might possibly be criticism as to the expediency of discussing this question at this time, but within the last thirty years since the Civil War, discoveries have been made as to the nature of the communicable diseases, discoveries which are of such an important character that the subject of the communication of these diseases needs to be restated and discussed anew, in so far as their prevention in camp is concerned.

Prior to thirty years ago we had opinions as to how diphtheria was communicated, and in regard to the spread of dysentery, but we had nothing but opinions, and our practice was of the vague and uncertain character which always attends action when that action is guided simply by opinion. But the labors of the microscopist and bacteriologist have replaced these opinions with more solid scientific material which produces in the mind conviction, a very different affair. We now know positively how typhoid fever is communicated; we know accurately how diphtheria is communicated, and for that reason it is proper that we should discuss the question of hygienic camps.

Permit me a single moment as to the trend such discussions should take. It would seem that the time has passed when the philosophy of the hygienic camp should be discussed, and I do not propose spending time to discuss it. The time has come when we should concentrate our efforts upon the consideration of the means of demonstrated value which may be put into operation in military life to produce these conditions of health for which they have proved adequate over and over again in civil life. We are not to discuss philosophy, nor expediency, nor desirability; we have moved on beyond that and will discuss the approved appliances of civil life which may be adapted to camp life, to the end that the same beneficial results, the prevention of disease, will prevail in the camp that have been known to follow under civil

TO ILLUSTRATE DR. HOPKINS' PAPER ON "HYGIENIC CAMPS."

Albany Medical Annals, April, 1899.



conditions. We will present the means by which our camps may have the simple, but priceless advantage of clean soil, pure water, fresh air, and, therefore, possibly be hygienic camps.

It may be observed that the hygienic camp of instruction must answer all military necessities, and that the appliances of hygiene must never conflict with or counter run to the requirements of the school of the soldier. Therefore, in the selection of a hygienic camp, the requirements of the commissary department, quartermaster's department and the medical department must be met, in case of a conflict among these various departments, the officer in command, of course, making the decision.

Experience is equally clear in determining that the first requisite of a hygienic camp is a clean soil. This principle must be absolutely observed in the selection of the camp site. The soil once clean must be kept clean at any cost. The question is one of exceeding simplicity, and simply requires means for the removal from the camp of all the solid and liquid excretions of the men. To accomplish this, it is necessary that the hygienic abomination, the camp sink, be abolished, care being taken that sewers of sufficient capacity with adequate fall, with convenient openings, be provided for the necessity of the troops. The cost of this work, including the digging of trenches, laying the sewer pipe, and the necessary traps for a camp for a regiment of 1,300 officers and men will not be beyond \$1,000. The time necessary for the prosecution of this work need not be more than one week.

The next requisite for the hygienic camp is to provide for the camp a bountiful supply of pure water, piped from a convenient distance, of sufficient force and volume to provide for the suitable flushing of the sewers. Taps should also be at the head of each company street, in each company kitchen, in the bath tents of officers and men and wherever required. The cost of this apparatus, yielding forty gallons of water per day per man, will not exceed per regiment \$4,000, per brigade, \$6,500, per division, \$12,000. In case the water supply of the camp is not absolutely above suspicion a distilling apparatus capable of distilling all the water required in the camp for drinking and culinary purposes should be provided. The cost of such distilling apparatus for a regimental camp will not exceed \$2,000. Should it be thought by any that such camp sanitation, even if efficient, would be too expensive, it is only necessary to call their attention to the fact that

sanitary appliances are already in use in the navy of this country, the cost of which far exceeds the estimate necessary to make absolutely hygienic camps.

The ventilating system on the battleship Oregon has been estimated by the Bureau of Equipment of the Navy Department to cost \$50,000. This investment is for the protection of the health of a complement of 424 officers and men. The Navy Department expends in the distilling apparatus of the ships of our navy sums which equal \$50 per man. It may be observed that this expenditure has never yet been faulted, and it would seem that the lives and efficiency of our men at arms on land are equally valuable with those at sea.

In a hygienic camp provision must also be made for the daily cremation of all camp refuse of an organic nature. The cost of suitable apparatus for this important part of camp sanitation would not exceed a few hundred dollars.

Keeping in mind the importance of the preservation of the soil, it is necessary that certain parts of the camp be provided with a concrete or other impervious covering. This is more particularly the case at the bath tents, company kitchens, urinals and such other parts of the camp as are more liable to organic contamination. The cost to provide for this covering would be at the rate of fifteen or twenty cents per square foot and the provision for all the points liable to soil contamination of a camp would not exceed \$700.

In camps of instruction a principle of extension has been introduced for sanitary purposes, and although the great numbers of the regiment live in a compacted space — perhaps one-third of the entire camp space — the whole camp was extended at its two ends, with sinks for the soldiers on one side and for the officers on the opposite.

This principle of extension was the best makeshift of the time, but it is obsolete in the presence of appliances for sewerage and properly flushing a camp, the fact being that the tent for closets fifty feet away is farther away than the camp sink at 500 feet.

The above items are not the opinion of the speaker, but are the estimates gathered from expert practical men in their several lines that may be considered absolutely reliable. They show the cost of sanitary appliances for the hygienic camp are: For sewerage, \$1,000; for water supply, \$4,000; for concrete, \$700; giving a total

of \$5,700 as the expense for a camp of a full regiment. In considering this matter you must not lose sight of the fact that these sanitary appliances are practically imperishable; at least they are likely to be serviceable for many years. The interest of \$5,700 at four per cent. is \$228 per year.

GUNSHOT WOUNDS INFLICTED BY THE MAUSER BULLET AS SEEN IN CASES FROM THE RECENT WAR.*

By H. BEECKMAN DELATOUR, M. D.,

Surgeon to Long Island College Hospital, Norwegian Hospital and St. John's Hospital, Brooklyn, N. Y.

The Mauser bullet is composed of an outer jacket of nickel and a core of lead, and is of twenty-seven calibre. The rifle is of the rapid-fire variety, delivering some forty bullets per minute, and is effective up to 4,000 yards. With such a range of effectiveness, it is readily seen that the velocity must vary greatly between the moment of discharge and the time its power is spent. According to the velocity at the time of impact, we find a variety of injuries produced. The severity of the injury naturally diminishes with increase of range. Careful experiments have been carried on to determine these effects, with the following findings. There is a distance of about 350 yards within which the impact of the bullet causes what may be described as an explosion. Beyond this limit, but while there is still great velocity, the bullet passes through the tissues producing very little destruction, while just before its force is spent the result is more laceration of the tissues.

At the Long Island College Hospital there were admitted to my service during the first two weeks of July, some seventy soldiers from the battlefields of Cuba. Some were only slightly injured and able to be about, some, while not confined to bed by their wounds, were yet unable to go about because of fever infection, while some were so seriously injured and in such poor general condition that their condition was critical. Of these cases we will give the histories of only those which are of especial interest.

* Read before the Medical Society of the State of New York, January 31, 1899.

A colored cavalryman was admitted with a granulating wound of the scalp just to the left of the sagittal suture; there was complete paralysis of the right upper extremity. Careful examination, after description by the patient, revealed a small scar at a point to the left of the external occipital protuberance and a deficiency of bone beneath the granulating area. The posterior point was the site of entrance, while the parietal bone was the point of exit of the bullet. At the field hospital the fragments of bone had been removed and the wound dressed. In the hospital we simply dressed the granulating surface until it healed. The paralysis of the arm rapidly improved and on September seventh, the day of his discharge, the function was nearly restored.

A very interesting case was the following: The bullet entered the left cheek, split the inferior maxilla, dislodging the second molar, and passing through the pharynx, entered the posterior wall of the pharynx. On admission, examination showed the wounds in the cheek and bone to be entirely healed. The head was rigidly held in one position and any movement of it caused severe pain. Two days after admission, the pain became very severe and remained so for about five days. Examination of the pharynx revealed a swelling which ruptured and was followed by expectoration of a large quantity of pus and immediate relief of the neuralgia. The opening was on the posterior wall of the pharynx and could easily be seen through the mouth, and through this opening the abscess cavity was easily washed out. On August eleventh, several spiculæ of bone were removed. By means of the X-Ray, the bullet was seen to be lodged between the spines of the fourth and fifth cervical vertebræ. The patient had improved greatly and desired to be removed to his home so that permission to remove the bullet could not be obtained.

In another case a bullet entering behind passed completely through the neck. On admission the scars were hardly to be seen. The patient suffered a very marked change of voice, probably due to paralysis of the left vocal cord.

Among the most interesting cases presented to us, were the penetrating wounds of the chest. The first one received was a member of the Rough Riders. He evidently received his wound while in the act of firing his own rifle, for the ball entered the left forearm, passed through it and entered the arm about the middle, producing a fracture of the humerus. It then escaped from the

inner surface of the arm, traversed the axilla, entered the chest in the mid axillary line, passed through the lung and emerged from the chest between the seventh and eighth ribs, and lodged immediately beneath the skin. On admission, the temperature was 103° F., pulse 120 and respiration 36; there was dullness on percussion and the respiratory sounds were absent over the entire left chest. There was marked dyspnoea and a dry, harsh cough. On July nineteenth, the chest was aspirated and some thirty-two ounces of fluid blood removed. The symptoms were relieved for two days, but gradually returned. On July twenty-second, an incision was made down to the eighth rib, the leaden core of the bullet removed and an opening made in the pleura. This was followed by the escape of two pints of purulent fluid. Through the tube inserted here, a large quantity of pus and debris was discharged. The patient improved somewhat, but after a week began to fail again. On August tenth, resection of the seventh and eighth ribs was done and the pleural cavity opened. Through this opening a large mass of degenerating blood-clot was removed. It was about two-thirds the size of the normal lung and exactly of the same shape. Following this operation, improvement was rapid and continuous. The patient was discharged in perfect health, except for a small sinus at the site of operation.

A somewhat similar case is that of a sergeant of the Twenty-second Infantry, who was wounded in the chest, the ball entering just below the left scapula, passing through the chest and neck and escaping through the alveolar process of the lower jaw at the site of the right bicuspid tooth. On admission all wounds were healed, temperature ranged between 100° and 103° and patient showed signs of septic absorption. The left arm was partially paralyzed and there was desquamation of the skin of the hand. The function of the hand gradually improved. Examination of the chest showed flatness on percussion over the entire chest. There was considerable dyspnoea. Exploratory puncture with the needle revealed nothing; as was also the case when performed by Dr. Senn on board the "Relief" during the passage north. The patient was then placed under ether and two inches of the seventh rib removed in the axillary line. On opening the pleura, a large quantity of thick pus was evacuated and also quantities of disintegrating blood-clot. Drainage was established. Recovery was rapid and steady, and when the patient was discharged, the sinus

was completely healed. The function of the left arm was not yet restored.

In eight cases the bullet passed through the chest without injury of viscera sufficient to cause marked symptoms. In one, the bullet after passing through the chest, entered the inner side of the right thigh and after passing behind the femur, lodged beneath the skin on the outer side of the thigh. It was removed from this position under cocaine anæsthesia.

Only one traumatic aneurism was presented to us. It was in a strong heavily-built man in whom the bullet entered on the left side of the neck one inch from the median line opposite the thyroid cartilage, passed over to the right side fracturing the right clavicle about the middle and escaped in the post axillary line opposite the fifth rib. On admission there was a pulsating tumor immediately behind the clavicle and occupying the second portion of the right subclavian artery. The patient was in poor condition as the result of continued fever, so operation was delayed. About six weeks later, the tumor began to enlarge rapidly and pressure symptoms became so urgent that we were forced to operation, although the general condition of the patient was not favorable.

Operation: A curved incision was made so as to turn a flap upward and expose the clavicle and tumor. This was very difficult, owing to the enlargement of the veins as a result of the obstructed venous return. The inner half of the clavicle was resected and the tumor exposed. It was then found to be an aneurismal sac situated between the artery and vein and communicating with both. The subclavian and carotid arteries were then tied and the tumor immediately collapsed. In an effort to free the vein, a small tear was made in the sac and considerable hemorrhage resulted. Efforts to clamp this opening only enlarged it, as the sac wall was very thin and easily torn. A ligature was then rapidly thrown around the vein on either side of the opening and the bleeding controlled. The wound was then sutured except for a small point for drainage. The operation lasted one hour and ten minutes. The patient was in very weak condition as a result of the loss of blood and shock; stimulants were applied and saline infusion done. He never rallied and died two hours later. No post-mortem was allowed. During the operation, a hard mass could be felt in the sac. This was probably a spicule of bone broken from the clavicle.

Injury to the liver occurred in one case, the ball entered on the

left side at the fifth rib in the axillary line and emerged on the right side in the mammary line between the ninth and tenth ribs. On admission, the wound of entrance was healed but at the wound of exit there was a sinus discharging bile. This patient was moved in a few days to the hospital at Governor's Island, so that we had no opportunity to follow the case further.

Of eight cases of wounds of the upper extremity only one was of sufficient interest to present in detail. The bullet passed through the arm about one and a half inches above the elbow; the brachial artery was severed. The artery was ligated at the field hospital. In this case the wound of entrance suppurated and infected the forearm. Owing to the infection and the diminished blood supply, extensive sloughing took place and the entire flexor group of muscles was removed. The wound slowly granulated. Of course, this left a crippled hand, but with what motion the remaining short and long muscles gave, the hand was much more useful than an artificial one could be. The motion at the elbow joint was restricted, but not destroyed.

Of twenty-six wounds of the lower extremity, only four present points of particular interest.

In one case the knee joint was infected. In this case Dr. Senn had operated on the "Relief" and thoroughly drained the joint with tubes passing from side to side, both above and below the patella. Recovery was perfect.

There were three cases of compound fracture, two of the femur and one of the leg. In the first, the bullet entered the outer side of the thigh and fractured the femur in the middle third. On admission there was some suppuration. The wound was enlarged, several fragments of bone removed and drainage established. Bullet was removed. The bone was firmly united at the end of eight weeks.

In the second case two balls entered the thigh on the inner side, within one inch of each other. One was a Mauser bullet, the other an ordinary 38 calibre lead bullet. On admission, the wound was suppurating, the bone was splintered and the patient suffering a high degree of sepsis with temperature of 102° and marked delirium. Three incisions were made to establish drainage, but to no effect. As the man was rapidly failing and delirium had changed to almost acute mania, it was decided to amputate. Accordingly amputation was done in the upper third of the thigh.

Following operation the temperature gradually came to the normal, but the mania continued. It was some six weeks before the patient became at all rational. He would constantly describe the fighting in his wanderings. Slowly the mind became clear and at the time of discharge his mental faculties were completely restored and the stump completely healed.

In the third case the ball passed completely through the lower end of the tibia, producing a fracture which entered the ankle joint. This case was also suppurating at the time of admission. The wounds were enlarged, thoroughly cleansed and adequate drainage provided. Recovery was uninterrupted and motion at the ankle was perfect.

The last case to be detailed, illustrates the action of the Mauser bullet in cancellous bone. In compact bone, the effect is to splinter more or less, while in cancellous bone the bullet will pass through simply making a channel for itself. In this case the bullet entered the thigh at the lower third and by X-Ray was shown to be located behind the head of the tibia. An incision was made over the point indicated in the picture and the bullet found with several small fragments of bone it had pushed ahead of it. In the condyle of the femur was a round clean-cut hole extending completely through the bone. A small amount of turbid fluid was found at the site of the bullet. The wound was closed without drainage. Complete recovery resulted.

Of the seventy cases under our care, only one resulted fatally and in only one amputation was necessary. This certainly is a grand showing for the Mauser bullet, as a humane weapon, as compared with similar cases in the civil war. The effect of the bullet is such that the injured is made unfit for duty as a soldier, but yet does not necessarily destroy life or else leave a helpless cripple.

Many of the cases, about one-half, that came to us, were suppurating. This in all probability was due to the fact that on every change of surgeon, the dressings were changed in order to know the exact conditions of the parts. Had a short history accompanied each case in the transfer, many unnecessary dressings would have been avoided, and the final recipients of the cases would have had a more intelligent idea of the original conditions than could be obtained from the patients.

We would like to show our appreciation to the officers and men

of the hospital ship "Relief" for the excellent condition in which we found every patient delivered to us by them.

Finally, I desire to acknowledge my indebtedness to my assistant, Dr. W. F. Campbell, and to the house surgeon, Dr. Isaac Manning, for the excellent work they did in caring for these cases under my charge. Also we would give due credit to Dr. J. Sherman Wight for his help in connection with the examinations and photographing with the X-Ray.

CARDIAC DEGENERATION AS EXEMPLIFIED IN THE SOLDIER OF THE LATE WAR.*

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When we speak of an organ as degenerated we imply that there has been a deterioration in its structure, that a change has taken place in the elements of its tissue, that there has been a disturbance in its nutrition, and in consequence of this we look for impaired function and possible suspension of function. Degeneration exhibits itself to us in more or less failure and incapacity.

We propose to speak of the clinical aspects of degeneration, as we have observed it to occur in the heart muscle and ganglia during and after the acute specific fevers, due to parenchymatous myocarditis of toxin origin, and due also to the nutritional disturbances attendant on those fevers.

There is much generalization to-day about the action of the pathogenic micro-organisms. That there is too much, the work of the bacteriologist and physiologic chemist warns us. Their study is rapidly working out the ultimate result of the effect of the toxins of these organisms on the various tissues, and it is from this source that comes the detail which will do away with the generalization. The text-book is still prone to lay stress on the lesion from which the disease derives its name, and to pass over the rest of the damage done with brief mention. For instance, the intestinal lesions in enteric fever are held up to view as the most important ones, most important from the therapeutic as well as the prognostic standpoint, and this is well as far as it goes.

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It is not well when it leads the attendant to allow his patient to pass from observation after danger from this source has ceased. There are others to be taken into consideration, which subsequent examination of such cases often proves.

The systemic invasion by the microbe with the production of toxins means interference with the cell, its functions, its nutrition, its structure. This holds true in the case of the cellular elements of the nervous, muscular, glandular or lymphatic and circulatory systems. The process leads to organic change which may be very slight, may be short in duration or may be extensive and prolonged, and even permanent, in short, end in permanent disability. We see immediately from this view of the matter that a very complex process is inaugurated by such invasion. With the organic changes thus established, and the disturbance of function, there must arise trouble in the normal operations of the body, and here will arise a second source of diseased condition. Certain products must be daily absorbed and elaborated and disassimilated to carry on the ordinary operations of repair and waste. The pathogenic micro-organism steps in to interfere with such operation. We have, therefore, in this case two fountain heads of toxic material, the toxins from the invader and that which comes from the tissues, secreting organs, foods, and putrefaction, a revolution having been established in the organism invaded, with the overturning of its ordinary laws.

If we study the effect on the heart of diseases due to microbic invasion, we will necessarily find two conditions, one due to the direct action of the toxin of the invader, and the other due to the demoralization excited among the functions of the body, which we will call nutritional disturbances.

Post-mortem examination reveals the fact that various changes are liable to occur in the myo and endocardium under these circumstances, and that they occur also in the nervous ganglia upon which the organ depends largely. They are of the varieties denominated inflammatory and degenerative, and at times lead to necrosis. Professor J. M. Van Cott made an autopsy on a soldier, a convalescent from typhoid fever, who had been under treatment in the Brooklyn Hospital. His heart had given moderate signs of degenerative changes during the latter part of the disease. In the face of repeated warning he was guilty one night of marked imprudence in the use of food and alcohol, and on

return to the hospital expired very promptly from acute dilatation. The autopsy revealed fatty and granular and other degenerative processes, due, no doubt, to infection and nutritional disturbance.

But we do not propose to enumerate the anatomical changes in detail. Suffice it to say that they lead to change in structure, weakening of structure, and therefore more or less incapacity to perform function. Fortunately these alterations do not always occur markedly. But that they do at times is a fact of sufficient importance to put one on his guard, for with proper care permanent damage may be avoided.

We are naturally led to inquire what are the symptoms pointing to these changes. The most apparent symptom is continued feebleness in cardiac impulse. Palpation will locate with difficulty the apex. If the impulse is perceptible at all it will be found frequently diffused. The pulse will be small and compressible, or in other words the ventricular wall will give signs of insufficient force to do its work properly.

If we examine the heart in this condition by auscultation we will observe a change from the normal, the soft blowing systolic murmurs at the apex and over the body of the ventricle being present in many cases, probably accounted for by relaxation of the ventricular wall, with a loss in muscular tension and consequent imperfect apposition of the valves. This symptom may be in abeyance during a period of quiet and in the recumbent posture. Again we may find the rhythm interfered with in various ways, giving one the impression that the right and left ventricle have parted company, or are working independently, and then you may find the decided intermission.

Again, the retarded venous flow warns us of failure of the heart to do its work properly. Cyanosis in various degrees may be found. The increased dullness on percussion at the bases of the lungs with the fine subcrepitant and moist rales yield to us important signs of sluggish circulation, these being so marked at times in one lung as to give the impression of intercurrent pneumonia. Œdema may show itself in various parts of the body also. The liver will feel the retardation of the current, and increase in size.

There is another symptom due to the same cause, and that is emaciation. This has been explained as due to interference with the absorbents, they being unable through deficient supply of blood to take up food properly, and being unable to properly deliver

their lightened burden by reason of the retarded current, the intravenous pressure at the point of entrance of the thoracic duct offering a barrier.

The attacks of dyspnoea which occur so frequently in these cases have their origin in disordered innervation as well as disturbed circulation.

Again, we have vertigo and annoying tinnitus aurium. These symptoms when intensified are familiar to us all from the description given by persons attacked by sudden syncope. Insomnia is another frequent and distressing phenomenon coupled with degeneration of the heart muscle. Its presence may at times be the important symptom for supportive treatment.

We have spoken of a change in the rhythm of the heart's action. We are safe in ascribing this to an improper nerve supply. Investigation has shown that the ganglionic cells may be profoundly affected by the toxins, that at times organic change, degeneration in them follows their invasion. It may be repaired or it may go on to necrosis, destruction of the cell. But the degenerative process will manifest itself at first by loss of power, and that loss of power will manifest itself in the disturbance of the function of the ganglionic cell or nerve fibre, we will have added to the disturbance of rhythm faulty trophic nerve influence and nutritive changes in the muscular tissues supplied by the ganglia. An additional cause of degeneration will therefore be added to those already mentioned.

Another point to be observed is the size of the heart. Dilatation may take place with increase in the area of dullness on percussion. It is a difficult, almost impossible, task to note slight changes accurately. It is well to attempt it, however. It will at times yield valuable evidence. There have been laudable attempts to reduce this procedure to mathematical accuracy. Long experience and more than usual skill will be required to note the minute changes recorded by some.

We have thus far considered the symptoms ordinarily presented to us of degenerative changes in the heart wall as they appear during and after the specific fevers. There are some other elements to be considered in a certain class of cases where there has been hypertrophy due to occupation and disturbed innervation. Increased functional activity and prolonged muscular exertion produce a thicker and stronger heart wall. We see this in the

laborer and the athlete. It has been fully and completely described in the case of the soldier and confirmed by autopsy. If the use of alcohol and tobacco be superadded to the increased activity, and if there be in addition continued emotional disturbance, we will have additional causes for hypertrophy from the stimulation of the cardiac ganglia by these agents. The nutritive disturbance which takes place in such an hypertrophied heart during a course of fever will be more marked than in an ordinary heart. The accustomed activity, the accustomed excitants, the former free supply of oxygen being removed, there must be a retrogression. This retrogression normally results in the product fat, and is oxidized and removed. But in the abnormal condition where there are disordered metabolism and increased formation, the products accumulate. There is a nutritive disturbance with fatty degeneration as a result. It may be answered that there is a decrease in the work in this case required to be performed. True in part, but there is an element here introduced which will render the organ in a measure unfit to perform its former work, an element which must be taken into consideration in the care of the patient in convalescence, and one which must influence the physician's judgment in advising the resumption of an occupation. A long time and careful exercise will be required to restore the muscle to its former strength.

So much for the symptoms of this condition. Now what is their significance, and what the prognosis. The significance is that there is danger of dilatation, or complete failure of the heart muscle. Their significance is that the heart is not to be subjected to extra strain as the muscle is in such a changed condition that it is, at least temporarily, unprepared for ordinary or extraordinary work. They furnish another indication, and that is for active medicinal treatment from the very beginning.

The prognosis, we are led to believe by statistics, is in the main not unfavorable, if the process is not extensive and if proper care is exercised. It is a condition often overlooked before dilatation occurs and that may be delayed for some time after the patient has been pronounced cured of his fever. We must remember that patients are discharged from the institutions from which these statistics come, very soon after they are able to walk about. They pass from observation, and the opportunity to note remote results is lost. We must look to the general practitioner for knowledge

of the latter. In support of this we may cite another instance which shows how misleading hospital records are in this particular. I refer to the record of results obtained in the treatment of fractures. The fact of union and the length of limb are noted, and the cure recorded. But you know and I know that the patient discharged as soon as union has taken place is in no position to exercise the member as he did before the injury. We hear little or nothing as to the restoration of function. Many months elapse before the normal function is restored. There are instances where it is never entirely restored, but the record of cure stands on the books.

It is the fashion to ascribe the murmurs and other symptoms of the condition under consideration to anæmia, and to prophesy that its removal will end the trouble. Little comfort is to be gathered from such decision, especially when it is noted that degenerative changes are prone to occur in the anæmic condition. Where the symptoms appear the patient should be watched and treated for a long time. Extended observation in private practice has made me very guarded in ultimate prognosis in the case of infectious disease. The press of the day frequently records the sudden death in the individual from over-strain, emotional and otherwise, and such deaths have their main cause in a heart wall weakened by change in its structure from various causes.

Our treatment must be based on certain physiological laws which govern the heart. We know that oxygen is very necessary for vigorous cardiac function. Dr. W. T. Porter has recently demonstrated what a marked stimulus it is to such function. He has found that even isolated portions of the mammalian ventricle supplied through their nutrient arteries with a small quantity of serum at very low pressure, will maintain long continued forceful contraction when surrounded by oxygen at high tension.*

We know that a large blood supply is necessary to the well-being of the heart muscle, and that that supply is received mainly through the coronary arteries, although the vessels of Thebesius and the coronary veins furnish their portion. Morbid conditions and experiment have proved the truth of this statement. Another fact well to bear in mind is that the volume of blood passing through the coronary vessels is increased by an increase of the

* *The American Journal of Physiology*, Vol. i, No. 4, 1898.

force of the heart's beat and *vice versa*. The coronary circulation is diminished by undue distension of the ventricle; such distension may arise from contracted peripheral arteries as well as violent and prolonged muscular effort.* The coronary arteries receive their burden during cardiac diastole. If we can prolong that at the same time we increase the force, we may reasonably expect benefit. On this basis we have treated the condition with a measure of success, especially in the case of the soldiers under our care in the hospital during the past weeks.

A superabundance of fresh air was supplied as the first requisite. The second was the careful use of heart stimulants with measures to relax arterial tension if it existed. Strychnia, belladonna and nitro-glycerine have admirably fulfilled these indications, alcohol digitalis and its class being reserved for emergency. In some cases small and repeated doses of morphia soothed the heart and increased the force with marked effect. Quinine in small doses, frequently repeated, was used with the latter end in view, acting as it does in these small doses to directly stimulate the heart's muscle. Its antimycotic property also rendered its use of special value in this class of cases.

The recumbent posture was enforced, not only during the acute stage of the disease, but for a long time after convalescence was established, it having the effect to slow the heart's action and decrease its burden.

We were particularly careful in the matter of diet, bearing in mind the disturbance caused by distension of the stomach and also the increased work imposed on the heart by the digestive process. The diet was limited in quantity and confined to the most nutritious articles. The deviation from this, due to the intervention of generous friends with their so-called delicacies, caused much trouble and in one case well nigh fatal results. As soon as the heart failed to be much disturbed by the sitting posture, and thereafter by motion around the ward or room, and by rapid breathing, the patients were sent out doors for moderate walks. They were not permitted to mount the stairs for some days, and then only under the careful eye of the physician, any appearance of dyspnœa or marked disturbance in the circulation being a signal for the subsequent use of the elevator. They were finally discharged from the hospital with the advice to avoid undue exer-

* *Ibid*, Vol. i, No. 1 and No. 5, 1898.

tion for some months, and in the meantime to place themselves under the observation of a physician.

A short sketch of the condition as observed in the case of the soldier may be of interest:

During September and December and a portion of October of last year and January of this year, I had under observation in St. John's Hospital, Brooklyn, N. Y., a number of soldiers, 272 all told, who had been engaged in the military operations of the late war with Spain. They presented signs of infection. There were some cases of typhoid fever among them, but the large majority were suffering from the effect of malarial infection in various degrees. In 155 of these there was marked disturbance of the vascular system which persisted in its manifestations until the time of their departure from the hospital. Of these, three only presented well marked signs of endocarditis; 133 presented the soft systolic blowing murmurs at apex and over the body of the ventricle, which I ascribed to the weakened condition of the heart wall. There were six with slight dilatation, eight with hypertrophy accompanied by murmurs, and five others exhibited the condition of tachycardia. Our records denominate the circulation of thirty-two others as weak.

There was no opportunity to examine the heart post mortem, as the mortality was nil, but the presumption is in favor of parenchymatous degenerative changes as the basis of the symptoms. That presumption rests on the knowledge of the effect of the toxins on the heart tissue, the persistence of the condition, the results of post mortem examinations in similar cases, and the experience gained by some years of observation. That experience has impressed on me the necessity of keeping patients under observation for a long time after the usual symptoms of the infectious diseases have subsided, to make sure that organic changes have not interfered with the normal function of that organ, pre-eminent in importance, the heart. I have had the misfortune to retain on my list some unpromising cases, but have the comfort of feeling that early discovered symptoms of weakness in the cardiac wall have done much to prevent increase of that list.

Opportunity has offered to examine five of the soldiers some weeks after their recovery from the fever. Their condition confirmed my first belief. The ankles were slightly œdematous in three, some dyspnœa was present in all on marked exertion.

There was no renal difficulty, the pulse was rapid and weak. Systolic murmurs developed at apex on exertion. They all showed signs of slight dilatation, the cardiac impulse being diffused over considerable space.

And what does this experience teach? Restrain your patient and measure well his capacity for endurance after leaving the sick room. In his degenerated tissues, in organic change requiring most careful treatment to repair, will be found the answer to question, and it may be complaint of parents and friends as to the prolonged convalescence.

DISCUSSION OF PAPERS ON MILITARY MEDICINE AND SURGERY.*

DR. A. VANDER VEER, of Albany: I cannot but feel a degree of embarrassment on opening the discussion on these two important papers. I saw very few of our returned soldiers—I saw only one wounded soldier. Nevertheless, as I listened to the papers just presented, I was reminded of the old days when a soldier down south in “the sixties.” I never read a clear explanation of why we did not advance any further at Petersburg until I studied Porter’s “Campaigning with Grant.” Major John Hancock told me at Petersburg, on June sixteenth, that the Second Corps numbered less than 10,000 men carrying guns, having lost 22,000 killed, wounded or missing since May fifth. As Porter explains it, we could not go any further; the men were tired out and exhausted, and, as General Grant understood, it became absolutely necessary to rest. As the men came to sick-call it was pitiable to see the old veterans, exhausted, weary and wounded, but not shrinking from duty, though presenting the condition so well described in Dr. Fairbairn’s paper.

As to the first paper, it describes an ideal camp, one for mobilization of troops in such a manner that our government would not shrink from raising the desired sum of money. But this hygienic camp would hardly answer to protect the men in the hurry and confusion of camp life; it is astonishing how careless the men are in camp. Nevertheless, the paper of Dr. Hopkins presents many good suggestions.

* Before the Medical Society of the State of New York, January 31, 1899.

If I read aright the signs of the times, and understand correctly the discussion now going on in the Congress at Washington, it is hardly possible that our regular army will be increased to 100,000. If we are to have future wars, we must necessarily depend upon our volunteer regiments, and we must take from our National Guard men who volunteer and go to the front in the form of battalions, or, better yet, complete regiments. In the care of these soldiers there must be a complete unity on the part of the commissary department, the quartermaster's department and the medical department. If not, the soldier must suffer, and suffer woefully. As I look back to the first year of the Civil War, in 1861, I call to mind the dreadful loss from disease. A very large number of men contracted diseases at White Oak Swamp. When the battle occurred there was a woful lack of co-operation on the part of the three departments mentioned who undertook to care for the soldiers. In time, the division hospital was organized, and I look upon it as a model which has not been improved upon. In our next war we must raise the number, just as before, from the different States. There must be a surgeon and an assistant surgeon, who will be men having some acquaintance with the soldiers of their particular regiment. It is because of this acquaintance that the soldiers have more or less confidence in their medical officers, and for this reason the regimental hospital should not be given up. To do so, I believe, would be a mistake. The sick and wounded men should have about them familiar faces; it is worth a good deal to them. I believe the regimental hospital will be of great service in the future, as it has been in the past.

We found at the end of the year of fighting that by taking well-known surgeons, and detailing one in charge of the medical supplies, another in charge of transportation (who was responsible for the hospital tents, and worked in harmony with the quartermaster's department, and knew how many wagons and ambulances would be needed), another in charge of the cooking and supplies of food, and another in charge of locating hospitals and attending to the hygiene, an efficient hospital system could be established. In this way the duties of the surgeons were divided. I remember well that within fifteen minutes after the first wounded man was brought back in the Battle of the Wilderness, our hospital was thoroughly organized. In the course of a few hours at the "bloody angle" we had 1,900 wounded men brought in, and still

there was no confusion. They passed through the hospital, and then were sent down to the base hospital without confusion and did not suffer from lack of attention. This plan was carried out through the remaining three years of the war.

On the march, when the soldier is stopping for from two to five days, and is brought up against the enemy's breastworks, and heavy loss is sustained, it is absolutely necessary to halt and attend to the wounded. At such times, we found that it was necessary to look after the sanitary condition of the camp.

I believe that these papers presented here to-day are proper. I am unable to discuss the question as thoroughly as it should be. I have heard a great deal said about the Red Cross and about the White Cross, about our poor soldiers not getting enough nourishment and about their not getting delicacies which they were entitled to. After the first year of the Civil War there was the United States Sanitary Commission, which was worth everything to the poor soldiers. When in front of Petersburg we had regimental hospitals, with from five to twenty men from each regiment. There was an arrangement with the commissary department that when a man was unable to take his ration we did not accept it, but got its face value, and with this bought such things as canned milk and fruit. This did much to keep the men in proper condition, and by this system a great deal was accomplished without calling upon philanthropists. Our own government is ready to help its soldiers, nevertheless we have had a lamentable exhibition of what has been done in the recent war. Alas! the experience which was accumulated in the Civil War seems to have been forgotten. Whenever the army advanced into the enemy's country at that time, the quartermaster's and commissary departments worked harmoniously. The secret of our success, I believe, was to be found in our working together, and our knowledge of hospital organization.

DR. WILLIAM WARREN POTTER, of Buffalo: It is pleasant, after so many years, to find myself associated with men with whom I served in the field during the Civil War, as well as with those of a later day, in discussing questions of camp sanitation. I take it that in view of the new period of "expansion" which we find the Republic apparently entering upon to-day — whether for weal or woe I know not, but as the legitimate, though possibly

unexpected sequence of a war which it did not primarily seek — it is wise that we should in this representative civic body discuss questions of military sanitation and hygienic economics.

It is quite probable that in the minds of the people in general there is a misunderstanding with regard to the duties of military medical officers serving with troops in the field. It is almost a misnomer to call these medical officers "surgeons." As a matter of fact, surgeons proper are only rarely required in military life, whereas physicians and hygienists are needed every day. It is, therefore, a matter of great moment that we should discuss at this time questions relating to the prevention of disease; questions that inevitably lead us into problems in sanitary economics. These latter questions have been very carefully prepared for you by that eminent sanitarian, Dr. Hopkins, who proposed this subject for discussion and has submitted the items of cost which must necessarily enter into its consideration.

There are, for the purposes of military life, three great divisions of camps, viz.: (1) The camp of instruction; (2) the camp of mobilization, and (3) the temporary camp or bivouac of an army engaged in an active campaign. The bivouac may be, by military necessity, suddenly converted into a permanent camp. This happened to Grant before Vicksburg. It again happened to this great commander at Petersburg. Coming before Petersburg on the 15th of June, 1864, and suddenly encountering the enemy, with orders to his corps commanders to brush him away and enter the city, he found himself suddenly estopped by causes which he could not foresee, although one of them has been very properly stated by the last speaker, my distinguished friend, Dr. Vander Veer. The troops bivouacked that night and practically occupied the same territory until April 2, 1865; that is to say, nearly ten months.

If we expect to protect the lives of our soldiers when they are taken suddenly from civil life and deprived of its comforts, we must take them to a place where at least those comforts and conveniences, at least the necessities of life and health, are as little abridged as possible. We must take them into a place where they have good water, good air and proper food. In order to insure health to the soldier, we must secure for him these essentials.

It takes anywhere from six to ten months to train a recruit coming from civil life to that degree of perfection in which he is considered fitted for the duties of an active campaign. It was

formerly the practice in the regular army, after enlistment, to assign the recruit to a camp of instruction located in that part of the country most convenient to the corps to which he was to be assigned, and here he was kept for six months as a recruit. He was then sent to his regiment and trained for four months more as a recruit before he was placed in the company in which he was expected to perform duty. That method has been somewhat changed. He is now sent directly from the recruiting post to his command, but the time of his instruction has not been changed; it occupies from six to ten months. Now, if it takes ten months in the regular army to do this, is it not somewhat remarkable that we find the Republic raising an army of 260,000 men and sending them to their various camps of instruction and mobilization; thence transporting a portion by sea into a tropical country; conducting one of the greatest of foreign wars in which we have ever participated, and bringing them back to a peace footing — all within the brief period of 113 days? It takes some time to fit a volunteer for camp life, and a still longer time before he ought to be considered available before an enemy. In a short war like the late one, where the losses have been barely 3,000 out of a total of 260,000, the showing is not one of which we may be ashamed — indeed, it is one of which we have good reason to be proud. I wish, therefore to emphasize the fact that the Spanish-American War ought not to be a war of criticism; it ought not to be a war of regret, or of crimination and recrimination, but a war which presents one of the proudest pages of American history. In my opinion, the criticism heaped upon the medical and other departments has not been deserved.

To be sure, there was an unpreparedness for war which was to be regretted, and it was for this very reason that this discussion has been held. Enlightened upon the necessary points, I hope our members of Congress will yield to the applications made by the War Department for appropriations which will admit of the establishment here and there throughout the country of hygienic camps, such as those which have been described in the paper of Dr. Hopkins. These camps of instruction would prove of very great value, and would be also most economic investments. A sick soldier becomes a most expensive care for the government.

With regard to the so-called delicacies that a soldier is supposed to need, I would say that a soldier does not require any delicacies;

he needs only the necessities of life, just such as are furnished primarily by the government, or, when he is sick, secondarily by purchase, in the manner described by Dr. Vander Veer. I remember during the Civil War spending in this way \$1,200 at one time for such supplies as were not primarily furnished by the government, but which were actually needed by the sick and wounded soldiers in the hospital of the First Division of the Second Army Corps, of which I had charge for more than a year.

When these hygienic camps are located, it should be done by a commission representing the surgeon-general, the engineer's department, the commissary department and the quartermaster's department. They will then be established on a scientific, economic and useful basis.

Clinical and Pathological Notes

Report of a Case of Lymphangioma of the Tongue.—Mabel R., aged twelve, school girl and native of United States. Family history: negative. Personal history: When three years old her mother first noticed a warty growth on the left posterior surface of the dorsum of tongue. It caused no disturbance, hence received little attention. It grew and spread slowly until about one year ago, when it had completely covered the surface of the tongue and extended down on the left side, and beneath as far as the frenum.

At no time was there any pain, but its thickness was noticeable in her speech, and she began to have trouble about keeping the mouth closed, which gave the face the lack of expression noticeable in children with adenoids, and in her sleep the saliva dribbled and wet the pillow.

Upon inspection it resembled very closely honey comb, in miniature. The lymphatics were abnormal in size, and very numerous. The papillæ similarly abnormal were tipped by red blood caps, some of which were almost black, particularly the larger and older ones. When pricked with a needle pure or blood stained lymph flowed. A diagnosis of the condition was made and a specimen snipped off, and sent to the Bender Laboratory for confirmation.

As the patient lived out of the city mild measures were first adopted. The tongue was cocaineized with a ten per cent. solu-

tion, and dichlor-acetic acid applied, but with little effect. The next time a strong solution of chromic acid was applied but the result was not much better. Then a platinum wire cautery making numerous punctures at a time was employed. This too was not sufficiently effectual. Chloroform was then administered and the Pacquelin cautery applied until the area covered was burned to a char.

She has returned every three or four weeks and the process has been repeated twelve times under chloroform. Her tongue is now quite normal in size, but it is evident that the growth is not yet wholly destroyed. Had this growth been allowed to go on, in time she would have had the extremely unpleasant condition known as macroglossia. If it had been operated upon at its inception it could have been easily cured by excision, the best treatment when possible.

C. HARPER RICHARDSON.

27 Eagle Street.

Correspondence

MUNICH LETTER.

MUNICH, BAVARIA, *March 4, 1899.*

The winter semester in all the German universities is fast drawing to a close, and the difference from the end of term time in America is very noticeable. The German students have an air of happiness and are light-hearted at the prospect of so soon enjoying a "well-earned" rest, which is not the case with us. The American student at this time begins to burn midnight oil and to cut down his allowance for sleep and recreation, and starts in to cram for the examinations. The German system is perhaps the better.

During the intervals between the semesters short vacation courses are given by the assistants in many of the universities, which are very good. These men are allowed to use the hospital material for this purpose, and they take great pains with the instruction. These "Feriencursus" are especially good in Berlin and Vienna, where they are only open to physicians and are limited in number. The leading professors give courses at these uni-

versities, which are eagerly sought after and are filled long before the holidays begin.

This spring, in Berlin, over ninety courses are open to practicing physicians. In Munich, two of Professor v. Winckel's assistants have announced their intention to hold a "Feriencursus" in obstetrics and gynæcology, which should be most valuable, judging from the wealth of material at their disposal.

During the holidays two important medical meetings will be held. The twenty-eighth Congress of the German Surgical Association will meet in Berlin from the fifth to the eighth of April. A few days later the seventeenth German Congress of Internal Medicine will convene at Karlsbad. A program of great interest has been provided. At the first session, Professors v. Schrötter, of Vienna, and Martins, of Rostock, are to lead a discussion on "Insufficiency of the Heart Muscle," and a session devoted to "Leucæmia and Leucocytosis" will be led by Professors Lowit, of Innsbruck, and Minkowski, of Strasburg.

On the fourth of next September is scheduled an International Conference for the Obviation of Syphilis and Venereal Diseases. The following questions are to be discussed by physicians and laymen:

1. Has the present system of regulation any influence on the spread and frequency of syphilis and venereal diseases?
2. Is it possible to improve the present system of medical supervision?
3. Exclusively from a medical standpoint is it well to permit "open houses?"
4. Can the police supervision of prostitution be improved?
5. Through what legal measures can the number of professional prostitutes be lessened?
6. Through what general rules can, as seen from prostitution, the spread of syphilis and venereal disease be successfully combatted?

Professor Nolldeuser, of Dresden, has discovered a compound called acoin, which, he claims, is a better anæsthetic than cocaine. He has produced complete anæsthesia in a rabbit's eye with the injection of a one per cent solution. Stronger solutions produce irritation. For infiltration anæsthesia he uses a one per cent solution of acoin with an eight per cent solution of calcium chloride, the action of which is said to continue forty to fifty minutes.

Professor Gegenbaur, of Heidelberg, who is one of the most renowned anatomists in the world, and who is the author of a splendid text-book on that subject, has just been decorated with the "Great Cross of the Order of the Lion of Zahringia." He has also, with Professor Kussmaul, the veteran professor, been given the honorary freedom of Heidelberg, the highest honor that city can bestow.

The director of the University Augenklinik, in Munich, Professor v. Rothmund, has announced his intention to withdraw during the course of this year from his connection with the university. His resignation causes much surprise and regret, as he is not very old and is very popular with the students and with the Munich people. His father held the same position in the university before him.

One of the sad possibilities in the life of a bacteriologist was illustrated in Munich very recently. Dr. Knorr, a privatdocent in the Veterinary School, was doing some work with the bacillus of horse Rot when he accidentally became infected. He went directly to the hospital, but succumbed to the malady a few days ago, in spite of the very early treatment. Dr. Knorr was a brother of the Dr. Knorr who discovered antipyrine, and he was looked upon as a young man of great promise and ability. He has written two papers on the poison of tetanus, which were published not long ago in the *Münchener Medizinische Wochenschrift*.

It was very gratifying to me, as an American, when Professor v. Winckel, a few days ago, in a lecture on abdominal surgery, gave Dr. MacDowell, of Kentucky, the credit justly due him, and passed around the class a photograph of the house in which Dr. MacDowell performed the first laparotomy.

H. L. K. SHAW.

FEIGNED INSANITY.

To the ALBANY MEDICAL ANNALS:

The appearance in your last issue of an article on feigned insanity recalled a personal experience, the report of which may be of interest to your readers. The case is especially noteworthy as illustrating the occurrence of feigning in a criminal who had been an inmate of an asylum for the insane and who presented at the

time some of the earmarks of degeneracy. The method employed to detect his shamming was also unusual.

J. R. was a deserter from the British army in Canada. Finding his way to New York State, he obtained employment with a farmer near the St. Lawrence river. On the second day of his employment he left his fellow-workmen in the field and went to the house, where, finding the farmer's sixteen-year-old grand-daughter alone, he forcibly raped her, brandishing a knife and threatening to cut her throat if she did not submit. He immediately ran to the river, stole a boat and landed on one of the Canadian islands in the St. Lawrence river. An hour or two later the constable and other men captured him on the island. He then informed the officer that he was a subject of Queen Victoria and was on her land, and that they could not take him across the water without extradition papers. But, as he had already stated that he was a deserter from the Canadian army, they convinced him that it would be very dangerous for him to return to Canada. He therefore went with the officer without papers. Immediately upon being placed in jail he feigned insanity. The chief feature of his feigning was his refusal to talk, but he made loud, disagreeable noises with his mouth, broke furniture and created such disorder that the sheriff thought it necessary to lock him in a cell; and, still persisting in his tumult, he was silenced only by turning on the hose. In a corridor of the jail, when visitors were admitted, he would go through performances similar to those of a soldier on horseback using his sabre. In the jail he also at times ate his own fecal matter. He had amongst the prisoners one confidant, with whom he talked and by whom he sent a note to a friend outside, which came into the district attorney's hands. The note referred to some small articles of personal property. With the exception of this one fellow-prisoner, he did not say a word to any person from his incarceration, in May, 1888, till his trial, in October. He also pretended to abstain from food, but was fed by this same fellow-prisoner.

The court appointed a commission to inquire into his mental condition. The commission consisted of a lawyer, W. M. Rogers, and two physicians, Drs. Spencer and Blake, of Watertown, N. Y. During the examination of witnesses in his office, the district attorney exhibited to Ryan the note which he had written. The prisoner took it, and while he was examining it, the district attorney

turned away. A second or two afterwards he looked in vain for the note. The prisoner must have swallowed it. About this time I arrived in the office of the district attorney, having been summoned as an expert witness. I found the prisoner with head bowed and resting it upon a desk at which he was seated. He seemed to be utterly indifferent to his surroundings. I removed his hat and tried to engage him in conversation. To several simple questions he made no reply, but began at once to fumble boisterously with my watch-chain, watch, sleeve-buttons, shoes, etc. Presently he began to laugh in a foolish manner and grabbed my clothing. This he did repeatedly. Thereupon he proceeded to expose himself. When asked if he had ever been in Longue Pointe Asylum, he mentioned the names of two physicians connected with that institution and resumed his acts of wanton mischief and restlessness. I found his pulse of good volume and tension, his skin moist, no rise of temperature; in fact, I was unable to discover any indications of ill-health. After this examination the patient began to strain and expressed, in vulgar language, a desire to relieve his bowels. He left the room quietly with the sheriff, but before going looked about him with fixed stare and as if in fear of some imaginary person. It was evident that the complex of symptoms here presented could not be reconciled with the clinical facts of any one form of insanity. The suggestion was then made that ether be administered to the prisoner in the hope that under its exhilarating influence he would express himself freely. To this the district attorney assenting, and the prisoner having been brought back to the room, I expressed in his hearing that I believed him to be shamming; that he feigned three forms of insanity at once, namely, mania, melancholia and dementia, which was a clinical paradox, and that I should put him under the influence of an anæsthetic to determine, by actual examination of his brain, whether or not his insanity was real or feigned. The attempt was resisted by the prisoner. In a full round voice, different entirely from that which he had used up to that time, he asked, "What are you going to do with me?" He was overpowered and restrained, but finally, by the exertion of great strength, released himself, saying: "I am shamming, God damn you, will that do? Let me up." On the trial he gave no testimony. His continued silence in jail all summer was manifestly inconsistent with testifying on the stand, and for that reason, pre-

sumably, his attorney did not allow him to testify. He was convicted and sentenced to twenty years in the State prison at Auburn. On his way to Auburn he talked freely and rationally with the sheriff.

I heard nothing of the prisoner from that day until, after reading the article in the ANNALS, I made inquiry at Auburn and ascertained that he was transferred in May last to the Matteawan State Hospital for Insane Criminals. I have already stated that before J. R. committed the crime of which he was convicted he had been a patient in a Canadian asylum. He is said to have been discharged recovered. The testimony of Dr. H. E. Allison, medical superintendent of the Matteawan State Hospital, leaves no room for doubt as to the man's present mental condition. I am informed that while at Auburn, J. R. exhibited outbursts of great excitement and irritability. His medical certificate states that he was quarrelsome and had made several attacks on some of the convicts, wounding one with a knife. He was easily disturbed on the slightest provocation, and had at these times no power of self-control. While in prison he was subjected to numerous punishments and fines, so that he lost a large share of his convict's earnings. He proposed to do the prison binding, and while he was locked in his cell occupied himself in binding books. While in prison he complained that they "doctored" his food and that they kept him awake nights; that he was the subject of numerous annoyances. When admitted to the Matteawan Hospital he had well-marked delusions of persecution. He soon became an excellent worker on the wards, but does not admit that he is insane, ascribing his transfer to Matteawan as a part of the plot against him. He spends much of his time in composing poetry and has written a great deal, his intention being to some day have it published. As soon as he has completed one of his effusions, he sends it away and has it typewritten and carefully preserved. He takes pride in his verses and shows them to attendants and others, and states that some day he expects to make money through publishing them, and furthermore that his name will go down to history as a great writer. He worked upon the ward for a time and is now employed in the tailor shop.

In Dr. Allison's opinion, the man has well-marked symptoms of paranoia. Since his admission he has claimed that he is not insane, but that for the sake of getting away from his persecutors he remains there willingly. He is a quiet, orderly man, a good worker, but apt to get into trouble with others, and has committed some assaults since his commitment to Matteawan.

That J. R. is a degenerate admits of no doubt. Indeed, whether he was of *sound* mind, in a medical sense, when he was sentenced to prison may be questioned. The extent to which he was morally responsible for his crime is another question. That he feigned insanity to escape penalty is beyond peradventure. It would seem, too, that his condition did not warrant his transfer to Matteawan until he had served nearly ten years of his sentence at Auburn; in other words, that he was not considered insane by the Auburn authorities until about the time of such transfer. Simulation of insanity by the insane is not rare. Usually the intellect is not greatly disordered in such cases, and the object almost invariably is to escape punishment for crime. These cases belong to the "born criminals" of Lombroso and the Italian school, their instinctive phrenasthenia showing itself in an innate tendency to perverse or criminal acts.

G. ALDER BLUMER.

Utica State Hospital, *February 27, 1899.*

ROCKWOOD HOSPITAL, KINGSTON, CANADA, *March 9, 1899.*

EDITORS, ALBANY MEDICAL ANNALS:

SIRS.—Dr. Allison's notes upon feigned insanity, in the March issue of the ANNALS, are much to the point and accord with our experience in Ontario. With the general public, feigned insanity is an exceedingly common event, especially when the so-called insanity plea is entered at a trial. I have been called in many criminal trials to give evidence regarding the mental condition of prisoners, and in one instance only have seen a deliberate effort made to simulate insanity. This was so overdone that it was detected at once, and the prisoner was clever enough to recognize the uselessness of his attempt to deceive, in a very few days, and

promptly tried a more promising line of action. Of course, our general public is much alive to the dangers of the insanity plea, and goes on hanging lunatics with a regularity that should prove an absolute preventive of mental disease, if there is anything in such a method of prevention. As a cure of insanity this means seems to have been radical, and the so-called Canadian medical expert is without honor in his own country — that is, in criminal cases; it makes a difference when the case does not involve a criminal action. Under our law, a jury can bring in a verdict of insanity without a reference to medical testimony. It occasionally takes advantage of the “common-sense” method of dealing with such cases, and not long ago a man who had shot a companion during a brawl, was sent to an Ontario institution by a jury, as insane. It is said that the evidence on which the verdict was founded, was the proof that the prisoner was in the habit of visiting his wife’s grave and shedding an occasional tear. Such extraordinary conduct in a utilitarian age was proof conclusive of a mind diseased, and the prisoner accepted the verdict with a determination to make himself worthy of the confidence expressed in him by the jury. When admitted to the hospital he said there was no question about his insanity, but no doubt he would recover from it by the time the spring work opened — and he did. It is interesting to know that he has had no recurrence.

Another case came under my observation: A prisoner sentenced to the Central prison for an attempt to murder, developed melancholia suddenly and was transferred to the hospital. His melancholia was present only when he supposed himself to be under observation; in the meanwhile he made preparations to escape. When it was made plain to him that his case was understood he threw off the mask and was returned to prison. He developed a second attack of melancholia and was transferred to the hospital once more, and in a few days effected a dramatic escape and became, let us hope, a useful citizen of the United States.

Successful attempts at feigning insanity are, I am quite certain, so rare, when looked into by men familiar with mental disease, that they are not the menace to the “interests of justice” so commonly supposed. It would take a criminal of high type indeed to successfully simulate, say, paranoia.

Yours truly,

C. K. CLARKE.

Editorial

Typho- Malarial Fever, So-Called.

Of the few favored terms used by indolent or unscientific diagnosticians to label a certain type of fever cases, typho-malaria stands near the head of the list. Probably no medical term, except it be malaria or la grippe has been used so carelessly and so unscientifically. As Dock points out in a recent article (*New York Medical Journal*, February 25, 1899), the term typho-malarial fever has been used: "1. To denote a combination of malarial and typhoid fevers. 2. To indicate a malarial fever with symptoms of the typhoid state, or, rarely, a typhoid fever with intestinal lesions, due to the same cause as malarial fever, and 3. Aside from the occasional use of the term to cover obvious diagnostic indolence, to indicate a fever thought by the person using it to be distinct from the typhoid fever of writers, though not necessarily due to malaria."

Dock carefully takes up these three propositions one at a time and analyzes them both in the light of his own experience and that of others. With regard to the first proposition, that the diseases, typhoid and malaria, exist together causing a peculiar disease, typho-malarial fever, he shows that though we have cases of mixed typhoid and malaria fevers they are of extreme rarity and furthermore have no characteristic symptoms which distinguish them from typhoid fever.

With regard to the occurrence of a malarial fever with typhoid symptoms, Dock comes to the conclusion that an uncomplicated malarial fever resembling typhoid, lasting more than a few days and uninfluenced by quinine properly given, is rare.

The use of the term typho-malarial fever in the third sense is not often encountered. When it occurs it is usually easy to discover that no deep-seated belief exists as to the malarial nature of the disease.

Dock goes on to discuss the curious mistakes made in diagnosis on account of the assumption that typhoid fever cannot take on a mild form, but must present great prostration, delirium, etc.

He closes by pointing out that his paper is not a mere discussion about a name, but involves important questions of diagnosis. To quote his own words: "Until the careful examination of the patient becomes the rule and he is treated for his actual con-

dition rather than the name of his disease, serious errors can best be avoided by discouraging slipshod terminology as exemplified by the current use of typho-malarial fever."

We agree with Dr. Dock thoroughly in all he brings forward in this article. There is a far greater tendency in the medical profession to try and explain certain clinical symptoms and label them with a name, than there is to investigate them and find out their underlying causes. As the late Sir William Gull used to say: "Savages explain, science investigates." There is still a good deal of the savage in mankind, and the medical fraternity as well as the rest of the *genus homo* has its share. We are acquainted with the causal factors in both malaria and typhoid. Why not drop the method of savagery and take up that of science.

**The Early
Diagnosis of
Typhoid Fever.**

The great difficulty heretofore in the bacteriological diagnosis of typhoid fever has been the similar reactions on media of the typhoid and the colon bacilli, which were for a long time considered by many observers as identical. Piorkowski has very recently brought to the attention of the Berlin Medical Society a medium which permits a rapid and easy differentiation of these closely allied micro-organisms.

This medium consists of normal urine of a specific gravity of 1020 which has been allowed to become alkaline and to which one-half per cent peptone and 3.3 per cent gelatine have been added. This is boiled for an hour in a water bath and then filtered. On this medium the colon colonies, after twenty hours at a temperature of 22° C., appear under low power as round, yellow, finely granular bodies with sharply defined edges, while the typhoid colonies are filamentous in form, with a characteristic centrifugal arrangement. Experiments were made with a number of different colon and typhoid cultures, and each gave this characteristic appearance. Water and fæces artificially inoculated with the typhoid bacilli gave the same result, while normal fæces in no instance showed colonies similar to those of typhoid.

The reaction was positive in cultures taken from the stools of four cases of typhoid, one of which was in the beginning of the second week, when the Widal reaction was not yet positive.

Although the author has determined the diagnosis only in a small number of cases, he has brought it thus early to the atten-

tion of the profession in order that his results may be confirmed or disproved. The method is certainly very simple, and the results are so strikingly different as to render confusion of these two bacteria impossible.

Scientific Review

The Etiology of Stuttering.—Not perhaps since the appearance of J. Wyllies' book, "The Disorders of Speech," in 1894, has this interesting subject been more thoroughly handled than by Dr. Holger Mygind, of Copenhagen, in an article in Fränkels' *Archiv für Laryngol. und Rhinol.*, bd. VIII, 1898. The author's opinions are based on personal observation and examination of 200 children and young people; they were all stutterers. The causes are classified as follows: Influence of sex, of age, of heredity, certain diseases of the nose, naso-pharynx and pharynx, certain constitutional diseases, and other remote causes. These are all predisposing causes. Under the immediate causes, the so-called psychical infection (contagium morale), acute infectious diseases, traumatism, and certain psychical influences were considered. There are more stutterers among males. Stuttering is most common during the second year, about half the cases observed by Mygind occurring between the second and fourth years. There is no doubt that heredity plays a very important part in the etiology of stuttering, as sisters, brothers and other relatives of stutterers frequently stutter. The 200 cases mentioned above had 124 stuttering relatives, one-half of these being their sisters and brothers. While idiocy did not seem to be very common among the stutterers' relatives and, in fact, does not occur very frequently in the State institutions of Denmark, stuttering may occur and frequently does, together with disturbances of a far more serious nature, such as the speech disturbances of idiots, with progressive paralysis and genuine aphasia. Kattwinkel and P. Marie have shown that disturbances of speech are very common in cases of hemiplegia, and that changes in the pharyngeal and laryngeal reflexes were more frequent with left-sided than with right-sided hemiplegia. In 50 cases of left-sided hemiplegia observed by the authors, the pharyngeal reflex was totally absent in 25 and diminished in 14. Disturbances of speech were very common among these cases, there

being a lasting disturbance in 25. This was not a true aphasia as is the case in right-sided hemiplegia. In 50 cases of right-sided hemiplegia, the pharyngeal reflex was only absent in 2. The occurrence of epilepsy and other similar convulsive seizures among the relatives of stutterers is an important etiologic factor, because it has been shown by Mygind and others that epilepsy occurs among the relatives of stutterers almost twice as frequently as among the relatives of deaf-mutes, and epilepsy and similar convulsive forms are known to be important etiologic factors in these cases. That diseases of the nose, pharynx and naso-pharynx cause stuttering, or at least are frequently the predisposing causes, would seem to be clearly proven by Mygind's investigations. He found, among other conditions, that adenoid vegetations were present in 78 out of 200 cases, chronic hypertrophic rhinitis in 42, chronic pharyngitis in 32 and enlarged tonsils in 23. The fact that adenoid vegetations were found in such a large percentage of the cases is interesting, because they are a somewhat disputed cause. It may not be out of place here to state some of the opinions of different authors. Kussmaul (*Ziemssen*, vol. XIV, p. 665) claims that stuttering is not due to any mechanical obstruction to the organs of speech, nor to any central failure of motive power, but to an inability to form a union of consonants and vowels, which is essential in order to form syllables. The stutterer's attempt to utter a syllable beginning with a vowel brings on the spasm of the muscles of speech, which spreads also to the respiratory and phonic muscles. Wyllie, in the portion of his book devoted to stuttering, lays great stress upon the fact that in the majority of cases the usual defect in stutterers is due to the delayed activity of the laryngeal mechanism, while in only a small minority of cases disturbance in the oral mechanism is responsible for it. Schmiegelow found adenoids in only 18 per cent of the stuttering school children examined by him in Denmark. Gutzmann holds that the presence of adenoids must not be regarded as a direct exciting cause. While this is probably true, there can be no question that hypertrophy of the lymphoid tissue in the naso-pharynx acts as a predisposing cause. Schereschewsky and G. H. Maknen have reported cases of stuttering cured by the removal of adenoids. Schereschewsky examined the larynx in 76 stuttering school children. In 6 there was present spastic aphonia, and in 3 atactiform movements of the vocal cords during phonation. The respiratory

movements were normal. That the majority of cases of stuttering are due to a spasmodic functional neurosis has been demonstrated by W. Oltuszewski (report in *Semon's Centralbl.*, Feb., 1897). Two hundred and fifty-one cases were examined by him. Gottstein (*Krankheiten des Kehlkopfes*, s. 262), under functional spasm of the glottis, considers a form of laryngeal stuttering in which there is a double phonation of certain words such as ca-can, no-not, etc. Landgraf thinks that the diaphragm probably takes part in the spasm and paralysis of the action of the expiratory muscles.

Mygind in his monograph also fully considered the peculiarities of temperament. Bright, intelligent scholars frequently stuttered, but many of phlegmatic temperament did also. Stuttering is frequently caused by children associating constantly with children who stutter, the so-called "contagium morale." Traumatism and acute infectious diseases, such as measles, scarlet fever, pertussis, etc., must also be considered as causes.

Gutzmann ("Ueber Sprachstörungen in der Pubertätsentwicklung," *Archiv. für Kinderheilkunde*, XIX, 5, 6, 1896) has described the psychical influences at the period of puberty as having a direct influence on speech. Nervousness, neurasthenia and hysteria occur to a considerable extent among the relatives of stutterers, and it is a reasonable conclusion that stuttering should be regarded a well-marked neurosis, with an etiologic relationship to the so-called degeneration neuropathies to which diseases like epilepsy, hysteria, neurasthenia, chorea, etc., belong. It would be unjust, however, to consider that stuttering is always an indication of degeneration or a neuropathic family trait, because many stutterers belong to families in which there is no hereditary nervous affection.

CLEMENT F. THEISEN.

State Medicine

Edited by Harry Seymour Pearse, M. D.

Important Bills in New York Legislature.—Assembly bill Nos. 354, 1264. An Act "To allow cities of the first class to establish, equip and maintain, outside of their corporate limits and with the approval of the State Board of Health, hospitals

for the regular treatment of the disease known as pulmonary tuberculosis." Introduced by Mr. Henry.

This act provides for the control of all hospitals and institutions treating persons suffering from tuberculosis by the local boards of health.

Assembly bill Nos. 839, 1546. An Act "To amend the Greater New York Charter, in relation to the appointment of a board of lunacy examiners." Introduced by Mr. Gallagher.

Provides for a salaried board of lunacy examiners for the city of New York.

Assembly bill No. 1001. An Act "Providing for the care and medical treatment at the State Provisional Annex of the Loomis Sanitarium for Consumptives at Liberty, Sullivan county, and at its hospital and dispensary branch in New York city, of persons affected with pulmonary tuberculosis, and making an appropriation therefor." Introduced by Mr. Henry.

This act provides for the payment by the State of not more than twelve dollars a week for patients sent to the Loomis Sanitarium, provided the State shall maintain at such sanitarium not less than fifty patients. Methods of procedure for admission are fully prescribed, and the sum of \$50,000 is appropriated.

Assembly bill No. 1104. An Act "To establish a State School of Public Health and making an appropriation therefor." Introduced by Mr. Henry.

This act provides for the establishment of a State School of Public Health, at the New York University in the city of New York, for instruction in matters of public hygiene and in the prevention of disease. Twenty-five thousand dollars is appropriated for the expenses of altering and fitting the present buildings of said college.

Assembly bill No. 1172. An Act "To protect the public health by regulating the sale of milk in certain cities of the State." Introduced by Mr. Trainor.

This act provides that in any city of over 500,000 inhabitants no milk or cream unless such milk or cream shall be Pasteurized or sterilized shall be offered for sale, and any violation shall be

followed by a fine of not less than fifty or not more than one hundred dollars.

Assembly bill No. 1178. An Act "To amend an act entitled 'An act to revise, amend and consolidate the general acts relating to public instruction, known as the Consolidated School Law, relative to teaching physiology, hygiene and narcotics.'" Introduced by Mr. T. P. Sullivan.

This act repeals the law relative to the teaching of physiology, hygiene and narcotics in the public schools, and is to take effect immediately.

Assembly bill No. 1213. An Act "To amend the Public Health Law, in relation to the sale of domestic remedies." Introduced by Mr. Costello.

This act amends the Public Health Law, in that it prevents the sale of the usual domestic remedies by retail dealers in villages of less than 1,000 inhabitants.

Assembly bill No. 1216. An Act "To amend sections 773, 774, 777, 780 and 781, of the Code of Criminal Procedure, relating to coroners, and abolishing coroners' juries." Introduced by Mr. West.

Assembly bill No. 1395. An Act "To provide for the qualification and certification of medical expert witnesses." Introduced by Mr. Kelsey.

This act provides that physicians who desire to be expert witnesses must send a statement of their qualifications and a fee of ten dollars to the State Board of Regents, and such qualifications are to be passed upon by the State Board of Medical Examiners, and upon their recommendation the applicant is eligible for an appointment as expert.

Assembly bill No. 1557. An Act "To amend chapter 661 of the Laws of 1893, entitled 'An act in relation to public health, constituting chapter twenty-five of the general laws.'" Introduced by Mr. Henry.

This amendment regulates penalties for illegal practice of medicine and dealing in fraudulent diplomas, and also prohibits certain forms of advertisements of alleged cures. Fines collected on com-

plaint of medical societies shall be paid to the society making the complaint.

Senate bill No. 475, 848. An Act "For the protection of public health, and to prevent mistakes in the handling of poison." Introduced by Mr. Wilcox.

This act provides that all poisons shall be disposed of in a package or bottle of peculiar or special shape, but the provisions of this act shall not apply to patent or proprietary medicines.

Senate bill No. 696. An Act "To amend the Greater New York Charter, in relation to appropriations for charitable, eleemosynary, correctional or reformatory institutions." Introduced by Mr. Stranahan.

Senate bill No. 935. An Act "To amend section 836 of the Code of Civil Procedure with respect to the competency of witnesses, and evidence in particular cases." Introduced by Mr. Brackett.

This act amends the law relating to the testimony of physicians in regard to confidential communications, except such communications as would tend to disgrace the communicator.

In Memoriam

URIAH BIGELOW LA MOURE, M. D.*

Uriah Bigelow La Moure, M. D., was born in Albany, N. Y., on March 4, 1844, being the eldest son of Ten Eyck and Sarah Bigelow La Moure. His father was a well-to-do grocer, and his son was educated at the famous Albany Boys' Academy. In 1875 he began the study of medicine in the office of Dr. John M. Bigelow and attended the Albany Medical College, from which institution he was graduated in the class of 1878.

Dr. La Moure always remained a resident of his native city, and continued in practice there up to the time of his death, which occurred somewhat suddenly on March 2, 1899, from fatty degen-

* From the report of the Memorial Committee to the Albany County Medical Society, March 8, 1899.

eration of the heart. He was at one time treasurer and subsequently president of the Albany County Medical Society, and was county physician for three terms. He was a member of the Elks, and also a life member of the Young Men's Association, and was always much interested in politics, having served as a delegate to State and National Conventions.

In 1877 he married Annette E. Grimm, of Middleburg, N. Y. He is survived by two daughters and a brother, Ten Eyck La Moure.

Medical News

Edited by H. Judson Lipes, M. D.

COMMENCEMENT OF THE CLASS OF '99, ALBANY MEDICAL COLLEGE.—The sixty-eighth commencement of the Albany Medical College will be held at Harmanus Bleecker Hall, Wednesday afternoon, April nineteenth, at 3 o'clock. Degrees will be conferred by the President of Union University, Rev. Andrew Van Vranken Raymond, D. D., LL. D. The Rev. William R. Terrett, of Hamilton College, will deliver the address of the day. The officers of the Class of '99 are as follows: President, George S. Post, of Fulton; Vice-President, Warren H. Everett, A. B., of Peru; Secretary, Michael F. Wansbury, of Troy; Treasurer, William G. Healey, of Cohoes; Orator, Thomas J. Lally, of Pittsfield, Mass.; Historian, Joseph H. Lanahan, of Albany; Poet, Daniel A. McCarthy, A. B., of Troy. Frederick Douglass Branch, of East Springfield, Mass., was chosen Essayist, with Christian G. Hacker, Ph. G., of Albany, alternate. Valedictorian, Edgar Roscoe Stillman, of Troy; alternate, Henry Powers Hammond, A. M., of San Francisco, Cal. The Executive Committee is composed of Messrs. Cordes, Deal, Delehanty, De Sobe, Fish, Flynn, Ford, Hinman, Hudson, Leonard, Lally, McCarthy, Shaw, Salmon, Hanes, Wardner, Smith and Cavanaugh.

The Association of the Alumni will hold its annual meeting in Alumni Hall at ten o'clock on commencement day. The decennial classes and the class of '74 will have reunions in assigned rooms to hear the reports of the class historians and to compare notes with their classmates. Dr. F. C. Curtis, on behalf of the faculty, will welcome the Alumni, and Dr. W. G. Tucker will deliver the president's address. The non-resident Alumni will be entertained at luncheon at the Albany Club and will receive the privileges of the Club. In the evening at the Stanwix Hall the Alumni dinner will be served. No effort will be spared to make this dinner thoroughly enjoyable. Dr. Herman Bendell will act as toastmaster.

ALBANY COUNTY MEDICAL SOCIETY.—A special meeting of the County Society was held in Alumni Hall on Saturday March 4, 1899, at 5 o'clock P. M., to take action on the death of Uriah B. La Moure, M. D. The President and Vice-President being absent, Dr. O'Leary was chosen Chairman. Dr. Stillman and the President *pro tem.* eulogized their former friend and classmate in the highest terms. On motion, a committee of five was appointed to draft resolutions on the death of Dr. La Moure. The following committee was named: Drs. Stillman, Hailes, Thompson, Lorenza Hale and Mereness. There being no further business, the meeting was adjourned.

A regular meeting was held Wednesday evening, March eighth, at Alumni Hall. Dr. Thompson presided in the absence of the President and Vice-President. The reading of the minutes of the last meeting was dispensed with. Dr. F. C. Curtis presented the first paper of the evening, on "Tuberculosis of the Skin." Dr. Sautter opened the discussion, followed by Drs. Blumer and Theisen. The second paper, by Dr. William H. Happel, on "Tuberculosis in Children," was discussed by Drs. Lochner, Jenkins and Munson.

ALBANY COLLEGE OF PHARMACY.—The eighteenth annual commencement exercises were held in Jermain Hall, Tuesday evening, March fourteenth. The graduating class was a comparatively large one, twenty-three men receiving their degree of Ph. G. Rev. A. V. V. Raymond, D. D., LL. D., President of the University, presided. The opening prayer was made by Rev. Archibald S. Love, pastor of the First Congregational Church. The address of welcome was made by Professor Willis G. Tucker, M. D., Ph. D., and the address to the graduates by Mr. Arthur L. Andrews. The valedictory was given by Earl Hanes. The prizes were awarded by Professor Albert L. Husted, M. D., Ph. G., as follows: To the senior student passing the best examination in all branches, \$20 cash, to Chester G. Moore; honorable mention, Merrit B. Eldrige, Harold Seymore; senior student passing best examination in pharmaceutical laboratory work and submitting best set of preparations made there, \$20 cash, to Franklin W. Scott, Jr.; senior student passing best examination in microscopy and submitting best set of microscopical mounts made during the course, \$10 cash, to Earl Hanes; junior passing best examination in all branches, \$15 cash, to Charles L. Ross; junior passing best examination in pharmaceutical laboratory work and submitting best set of preparations made there, \$15 cash, to C. J. Weller.

The annual meeting of the Alumni Association was held in Alumni Hall and was largely attended, First Vice-President J. Frederick Hogan presiding. The banquet held at Keeler's was an enjoyable affair, the Union College quartet assisting in entertaining the guests.

THE CHILD'S HOSPITAL, ALBANY, N. Y.—The twenty-third annual report of the Child's Hospital of Albany, N. Y., for the year ending September 30, 1898, has recently appeared. The managers are to be congratulated on the excellent showing of the work done. To quote from

the report: "Never in the story of its life has the record of satisfactory and successful service been more marked than in the year which has just closed. The results, as indicated by the health of the children, abundantly prove the fitness of the building, the constant faithfulness of the care of those who have the charge and the devoted skill of the physicians and surgeons." The report of the medical staff shows that there were 262 cases of disease treated in the hospital, of whom 162 were discharged cured. Thirty-eight were discharged cured, four died and fifty-eight remained in the hospital under treatment. This is an excellent showing when one considers the large number of chronic cases which are brought to this institution. It is to be regretted that there has been a falling off of gifts to this noble institution in the way of annual subscriptions and of contributions from individuals and churches. There is no work deserving of greater support than that done for the little children, and we trust that the friends of this institution will see to it that there is no lack of funds for the successful maintenance of the Child's Hospital.

PENNSYLVANIA MEDICAL SOCIETY.—The next annual meeting of the Medical Society of the State of Pennsylvania will be held at Johnstown, May 16, 17 and 18, 1899.

A CONGRESS FOR THE SUPPRESSION OF TUBERCULOSIS.—There will be held in Berlin, from the twenty-fourth to the twenty-seventh of May, a congress for the consideration of the best means for the prevention and suppression of tuberculosis. The Herzog von Ratibor and Dr. von Neyden are the presidents of the joint congress. Particulars may be learned by addressing the secretary-general of the organization committee, Dr. Pannwitz, No. 2 Wilhelm-Platz, Berlin, W.

OBSTETRICS.—Among the periodicals which have recently appeared we are pleased with the monthly entitled *Obstetrics*, edited by Dr. Edward A. Ayres, of New York. The initial number of this new journal made its appearance in January. It is devoted entirely to obstetrics and is published by the Van Publishing Company, New York city, also the publishers of *Pediatrics*. The editorials are on the important questions of the day and are considered in a fair and practical manner. Among the especial features are noticeable the complete Index of Recent Publications on the subject of Obstetrics, and the beginning in serial installments of a work on Physical Diagnosis in Obstetrics, which will run through the year. Thoroughness in medicine demanded and created specialties, and a thorough presentation of obstetrical literature requires a journal devoted to that specialty only.

NEW EDITOR OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.—At a recent meeting of the Board of Trustees of the American Medical Association at the Sherman House, Chicago, for the purpose of selecting an editor for the *Journal*, Dr. George H. Simmons, of Lincoln, Neb., was unanimously chosen. Dr. Simmons has been for a

number of years the able editor of the *Western Medical Review*, published at Lincoln, and besides being a versatile writer has executive ability of a high order. At present he is secretary of the Nebraska State Medical Society and of the Western Surgical and Gynecological Association. According to the resolution adopted by the board, Dr. Simmons will be compelled to devote his entire time to the interests of the *Journal*, the salary of the position having been advanced from \$4,000 to \$5,000. Dr. Simmons became a member of the association in 1897.

A PHYSICIAN'S GOOD FORTUNE.—According to the *Medical News*, March fourth, a physician in Kingston, N. Y., has recently inherited a quarter of a million of dollars. The will was contested by the testator's half-sister, who claimed it as being the nearest relative; but the surrogate decided that the will should stand. The evidence showed that the testator was taken ill while spending a few days at a hotel in Kingston. He sent for a physician, who, in spite of the fact that his patient was poor and unable to pay full fees, watched him through a serious illness and gave him the most devoted attention. Quite unexpectedly, the patient received the entire fortune of an uncle, and, anxious to show his gratitude to his physician, he willed it to him, assigning as a reason for the bequest that the physician befriended him when he was poor, when all his relatives neglected him.

THE WESTERN OPHTHALMOLOGIC AND OTO-LARYNGOLOGIC ASSOCIATION.—The annual meeting of the Western Ophthalmologic and Oto-Laryngologic Association was held in New Orleans, February tenth and eleventh. Owing to the unavoidable absence of the President, Dr. J. Elliott Colburn, of Chicago, the First Vice-President, Dr. W. Scheppe-grell, of New Orleans, presided. Two joint sessions and three sessions of the Ophthalmologic and Oto-Laryngologic Sections, respectively, were held, and many important papers read and discussed.

The following officers were elected for the ensuing year: Dr. W. Scheppe-grell, of New Orleans, President; Dr. M. A. Goldstein, of St. Louis, First Vice-President; Dr. H. V. Wurdemann, of Milwaukee, Second Vice-President; Dr. E. C. Ellett, of Memphis, Tenn., Third Vice-President; Dr. F. C. Ewing, of St. Louis, Secretary; Dr. W. L. Dayton, of Lincoln, Neb., Treasurer.

St. Louis was selected for the next annual meeting.

The following names were added to the list of honorary members: Dr. George Stevens, of New York; Dr. St. Clair Thompson, of London; Dr. R. Coen, of Vienna, Austria; Dr. E. J. Moure, of Bordeaux, France; Dr. J. Sendziak, of Warsaw, Russia; Dr. Marcel Natier, of Paris, France; Dr. C. Ziem, of Dantzic, Germany; Dr. A. A. Guye, of Amsterdam, Holland.

SALE OF PATENT MEDICINES IN SWITZERLAND.—We learn from the *Deutsche Med. Woch.*, of January fifth, that no secret or patent medicines can be sold in a canton without the certified permission of the local Board of Health, not even to physicians. O! what a land of promise! To think

that no pamphlets can be distributed advertising the self-cure of diseases or treatment by correspondence, except under the same conditions. Pamphlets recommending female regulating or anti-conception measures are forbidden altogether. In order to obtain the permit for the sale of any medicine, it must be submitted to the Board of Health with the formula, price, *et cetera*, and the question is finally considered by a committee from each canton, which decides upon its harmlessness, whether the prospectus is misleading, or the price exorbitant in proportion to the expense of manufacturing. The permit cannot be used as an advertisement in any way.

OHIO MEDICAL UNIVERSITY.—There have recently been several changes in the faculty of the Ohio Medical University. Drs. John M. Dunham, Professor of Gynecology and Pediatrics; M. T. Dixon, Professor of Materia Medica; J. E. Berry, Professor of Therapeutics; A. C. Wolfe, Professor of Rhinology and Laryngology, and E. J. Emerick, Professor of Dermatology, have resigned. Many of these men have been connected with the university since its inception, and it is a matter of regret that they have seen fit to sever their connection with this institution. Announcements have been made in regard to all of these chairs save that of gynecology. Dr. George H. Watson, of the Department of Pharmacy, has had his chair enlarged so as to include instruction in Materia Medica; Dr. Edwin F. Wilson, who was formerly connected with the university as Professor of Clinical Medicine, has accepted the chair of Therapeutics; Dr. Andrew J. Timberman will be Professor of Rhinology, and Dr. Thomas G. Youmans, of Dermatology.

THE DEATHS OF EMINENT MEDICAL MEN.—Dr. Joseph Coats, Professor of Pathology in the Glasgow University, editor of the *Glasgow Medical Journal*, *et cetera*, died in his fifty-third year from sudden collapse during a lumbar colotomy performed for the relief from the effects of a malignant tumor in the region of the descending colon.

Dr. Ernst Julius Gurlt, the well-known writer on fractures, died January ninth, in his seventy-fourth year.

George H. Stone, M. D.—The death of Dr. Stone, which occurred February nineteenth, removes from the Southern medical profession a well-known and highly accomplished practitioner. He was considered an expert on yellow fever and did notable service in the epidemic of 1876 in Savannah. For two years he was President of the Georgia State Medical Society.

Dr. Robert Harris, a well-known figure in Philadelphia medical circles, died at his home, February twenty-first. He was the son of a physician, the brother of William Harris, formerly President of Princeton College, and the grandson of Robert Paterson, a former provost of the University of Pennsylvania. Dr. Harris was the author of a number of articles in medical journals and the editor in this country of "*Playfair's Midwifery*."

Mr. Thomas Cooke, F. R. C. S.—In the sudden death of Mr. Cooke, a distinguished teacher has passed away. Mr. Cooke founded a private

school in 1870, known as the London School of Anatomy and Physiology, which was a rendezvous for foreign and provincial practitioners who desired to do special work in anatomy or to take out a practical course of operative surgery on the cadaver. He met with great opposition for a long while, but so persevering was he that he soon became an acknowledged authority on anatomical subjects.

PERSONAL.—Dr. Lewis F. Griffith (A. M. C., '97), formerly assistant surgeon of the First New York Volunteers, has recently been commissioned assistant surgeon in the regular army. Surgeon Griffith has been assigned to duty at Fort Ontario, Oswego.

Dr. Edmund Stevens (A. M. C., '98) has recently been appointed resident physician of the Mothers' and Babies' Hospital, which is situated on the corner of Lexington avenue and Fifty-second street, New York city.

Book Reviews

Transactions of the College of Physicians of Philadelphia. Third Series. Volume the Twentieth. Philadelphia: Printed for the College, 1898.

This volume contains the roster of the College, memoirs of fellows deceased during the year, a selection of the papers presented, and an appendix containing the report of the Library Committee, and lists of papers in the different Sections on Ophthalmology, Otology and Laryngology, General Surgery, General Medicine and Gynecology. The memoir of Harrison Allen by Horatio C. Wood is an analytical biographical sketch of more than local interest, and will be read by many admirers of the regretted anatomist.

The papers presented at the sessions of the College cover a wide range of subjects. Two rather reactionary papers, and the spirited discussions upon them, deserve more than passing notice. Under the title, "A Consideration of the Real Value of the Brand Bath in Typhoid Fever," H. A. Hare and Charles Adams Holder present an array of statistics of typhoid, deducing therefrom that the results of the Brand system are not altogether favorable; and that apparent improvement in mortality tables is to be attributed to other causes, such as improved nursing. The writers acknowledge a decrease of mortality of three per cent but rather curiously urge that this is offset by the dangers and inconveniences of the bath. Finally they advocate, as a substitute, cold sponging. In the discussion upon this paper, which was participated in by Drs. Osler, Tyson, Musser, Crozer-Griffith, Wood, Solis-Cohen, Meigs, Eshner, and Balliet, there was an expression of approval of the Brand method and of regret that the paper had been read, as being likely to encourage "men who are anxious not to use the bath because it is troublesome."

The second polemic was written by Dr. Arthur V. Meigs, and entitled "Reasons why the Placarding of Houses in which are Persons Suffering with Scarlet Fever or Other Contagious Diseases should not be Continued." The discussion upon this paper was vigorous, and included severe denunciation of the Board of Health. This is, of course, of special local interest, and it is to be regretted that no one was able to produce figures showing whether or not the placarding of houses has resulted in diminution of contagious diseases. No conclusions upon this subject have as yet been presented, and it seems the question might be very properly investigated.

The volume contains valuable clinical and pathological papers, and is well edited by Dr. Thompson S. Westcott.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Purulent Epididymitis as a Complication of Typhoid.—STRASBURGER (*Münchener Medicinische Wochenschrift*, January 3, 1899) reports a case of suppurative epididymitis following typhoid fever.

The patient, a man of twenty-four, had a severe attack of typhoid with five and one-half weeks pyrexia complicated by furunculosis and a gluteal abscess. Three weeks after the fever had disappeared he had a sudden attack of pain in the right testicle, which very rapidly became swollen and tender. The swelling was confined to the epididymis, and the cord and testicle proper were neither swollen nor tender. There was some elevation of temperature for the first few days after the process began. Nearly a month after the onset of the swelling two points of fluctuation appeared, which were opened and discharged thin reddish-gray pus. A month later healing was complete. The pus examined bacteriologically showed a pure culture of the typhoid bacillus. The author could find only one other case on record due to this organism.

Peculiarities in Malignant and Innocent Growths.—BENNETT reports (*The Lancet*, 7 January, 1899) the results of observations upon a number of cases of tumor in which an atypical course has been assumed. The uncertainty which attends these conditions has led him to divide his cases into three classes, from which he derives certain conclusions. These classes are: (1), cases illustrating the occurrence of tumors which, although apparently malignant, run an innocent course; (2), examples of the occurrence of tumors which, being apparently innocent, prove in the end to be malignant; and (3), cases illustrating the influence of the concentration of the mind of the patient upon the part, in the growth of innocent tumors or in the development of malignant disease. In the

study made by the writer the character of the growth has sometimes been determined by microscopical characteristics, and sometimes by the clinical manifestations only.

The conclusions are: (1), that certain tumors, although undoubtedly malignant in structure, pursue an innocent course and disappear spontaneously; (2), that certain tumors malignant in structure become quiescent, assuming a condition of negative malignancy; (3), that some tumors, originally innocent in type, pursue a course of extreme malignancy; (4), that microscopical examination in a certain percentage of cases is powerless to determine whether a growth will prove malignant or innocent in its course; (5), that the clinical behavior of new growths is often a better test of malignancy than microscopical examination; (6), that mental concentration on the part of the patient upon the site of the disease is a distinct factor in stimulating the growth of innocent tumors and in the production of malignant disease in certain susceptible subjects; (7), that in nervous subjects of the type described recurrence of malignant disease after operation is more certain and its growth more rapid than in persons of a placid or apathetic disposition; (8), that evidence is wanting to show that operation in cancerous tumors of the breast which have assumed the condition of negative malignancy is, as a rule, necessary or advantageous; (9), that although the practice of candidly announcing to patients suffering from malignant disease the nature of their complaint is, speaking generally, moral and salutary, it may be modified with advantage in patients of the nervous type.

Hydrocele Treated with Normal Liquid Ergot.—BECELAERE, in the *Medical Age*, January 25, 1899, reports very favorable results following the injection of ergot in cases of hydrocele. With the usual antiseptic precautions eight ounces of fluid were withdrawn and sixty minims of normal liquid ergot were injected into the sac. The inflammatory phenomena were decidedly mild as compared with those following iodine injections; pain less marked, less œdema of the scrotum, epididymitis moderate and subsiding rapidly. Patient was about on the fourth day and wore a suspensory bandage for a couple of weeks, and soon left it off entirely. Three months later, fluid had not reappeared and all induration was gone, leaving testicle sound and healthy as before the trouble, with the exception of a slightly atrophic condition.

On Re-establishing, Surgically, the Interrupted Portal Circulation in Cirrhosis of the Liver.—WEIR, in the *Medical Record*, February 4, 1899, reports a case in which he attempted to re-establish the portal circulation by surgical procedure. This has been undertaken in two cases by Morrison, of Newcastle-on-Tyne, and has received much attention from Dutch surgeons, having been performed by Lens, Van der Meule, Schelky and Talma. A four-inch incision was made on the right side of the upper third of the rectus muscle and the abdomen thoroughly emptied. The antero-superior surface of the right lobe of the liver, the corresponding diaphragmatic part of the peritoneum and the parietal peritoneum

adjoining the wound were freely scraped with the sharp point of a steel hat-pin. After the oozing of blood was arrested, the omentum was stitched up on each side of the wound, a small opening one inch long was made above the pubis to admit a drainage tube behind the bladder. Compression of the abdominal walls was effected by transverse strips of plaster extending from the ensiform cartilage to the drainage tube. The patient did well for three days, then he complained of much pain in the lower abdomen. He then became somnolent, with decreasing urine; pulse, 104-120; temperature never exceeding 100° F., and died on the fifth day after the operation.

The autopsy showed an extensive peritonitis most intense in the pelvis, which was probably infected through the drainage tube, as the operative area showed less of infective inflammation, although over the scratched areas, as hoped for, there were firm, fresh adhesions. The left lobe of the liver was much enlarged and over it were patches of fibrin containing many micrococci and scolices of the echinococcus. In the right lobe was a cyst in which there were numerous scolices. The presence of these scolices may have predisposed to the peritonitis or the colon bacillus which was largely found in the lymph by its escape from the liver, due to some of the scratches, might be regarded as a cause. The writer concludes that peritoneum does not tolerate a permanent opening as kindly as he thought, and hereafter will be inclined to run the lesser risk of a reaccumulation of fluid rather than that of drainage tube infection. The seven cases treated are too few to make any correct deduction. Of these seven, two recovered, two were not benefited by the operation and three died. Of course this operation is done only in those patients who are regarded as hopeless of cure by other measures, and thus the chances of success are necessarily at a minimum.

A New Method of Treating Pruritus Ani.—MATTHEWS, in *Medicine*, January, 1899, points out the difficulty of treating severe chronic cases of pruritus ani and his want of success in the use of the cautery. This condition may be found at all periods of life, and although it has been regarded as secondary to enlarged prostate, to vaginal discharge, to hemorrhoids and fistula, the author has found it frequently present with none of the above etiological factors. He believes that in these cases there is an inflammatory condition of the terminal nerves. Five cases have been perfectly and completely relieved by an operation which consists of a circular incision extending as far as the itching. In one case, it was carried three and a half inches out on the buttocks, up over the sacrum and into the perineum.

The tissue is carefully dissected away, an inch of the gut, if necessary, removed, as was done in three cases, and the wound allowed to heal by granulation. There have been no bad after effects. The granulation tissue skin over, and as the nerve supply is gone there is no more itching.

Guaiacol in Epididymitis.—PERRY, in the *Medical Record*, January 7, 1899, reports very favorable results from the applications of guaiacol in

epididymitis. Local applications over the cord and scrotum promptly relieve the pain. The swelling rapidly diminishes, being reduced one-half on the second or third day and almost entirely absent on the fifth or sixth day. The analgesic and antipyretic effects are especially marked in the acute stage of epididymitis, whether due to gonorrhœa or traumatism, less pronounced in the subacute varieties and do not appear in the chronic forms. His method is to apply one cubic centimeter of pure guaiacol over the cord of the affected side as it lies in the inguinal canal, and to paint the scrotum with two cubic centimeters of a mixture containing one part of guaiacol and two of glycerine. Two applications are made daily, and if the attack is very severe a third application may be used on the first day. Four or five applications are sufficient to effect a cure in the same number of days, and the liberal use of this agent will often abort an attack when seen at the beginning.

The only other remedial measures used were laxatives and suspensory bandages.

MEDICINE

Edited by Samuel B. Ward, M. D.

Rupture of the Heart and Aorta.—HAMPELN discusses this accident (*St. Petersb. med. Woch.*, 1898, No. 48), giving the results of his investigation of seven cases occurring in his own practice, and a review of the literature. The accident is a rare one, only five of his seven cases having occurred in a hospital practice of twenty years, in a total of 2,000 cases of heart disease. The substance of the contribution is summarized as follows:

1. There is a clinical distinction between rupture of the pericardial segment of the aorta and of the heart itself. Both conditions are almost absolutely fatal, but the quicker course, the more severe symptoms, especially the great pain in the abdomen with vomiting, indicate rupture of the aorta.

2. Ruptures which occur during acute attacks in the abdominal organs need to be differentiated, if possible, as in cases where they complicate biliary or renal colic, incarceration of the bowel, hæmorrhagic infarct of the pancreas, perforating peritonitis, etc.

When the weakness of the heart and pain in the chest are prominently manifested, so that the pectoral lesion is made certain, a wider differentiation between fatal acute heart affections with or without rupture, especially thrombosis of the coronary arteries and dissecting aneurism is not possible. For the positive diagnosis of rupture of the cardiac aorta, the only sure symptom is the gradually spreading area of dulness.

4. Symptoms of severe anæmia are not to be sought on account of the limited and slowly occurring extravasation of blood.

5. For the same reason the loss of blood is not to be regarded as a cause of death. In neither case is death of the character which results

from loss of blood; in the case of rupture of the aorta the fatal result is due to the compression of the heart by the acute pericardial stretching; in heart rupture, on the other hand, this acute stretching has not yet been established, and death must be attributed to severe disturbance of the heart muscle itself.

6. Therapeutically aspiration may be considered in cases of rupture of the aorta where there has been a large extravasation, because, as has been seen in cases of aneurism, healing of the rupture under such unfavorable conditions is not to be expected. In rupture of the heart the indications are for complete rest and the administration of anodynes. Counterirritants are not permissible in either case.

The Œdema in Nephritis.— REICHEL, in the *Centralblatt für innere Medicin*, 1898, No. 41, discusses the causation of the œdema in nephritis. Bright's opinion was that the œdema was due to the hypalbuminosis and hydræmia following the loss of albumin. Granger, Stewart and Bartels attributed it to the hydræmic plethora result of the loss of albumin and the insufficient excretion of water, and Gärtner, by slow intravenous injections, produced an œdema not only of the glands, the internal organs and the peritoneum, as did Cohnheim and Lichtheim, but also of the skin. Cohnheim also observed that in certain forms of nephritis an inflammatory or other change of the skin and the smallest blood vessels, with increased permeability, was the cause of the œdema. Senator agreed with Cohnheim and pointed out that the forms of acute nephritis especially inducing œdema, as that after scarlet fever, malaria, cold and complicating pregnancy, were glomerulo-nephritides, and that from the action of certain poisons circulating in the blood attacked the capillaries of the glomeruli and then by marked intensity or prolongation of the poison affected other vascular areas, as those of the skin and serous membranes.

The renal insufficiency in Bright's disease, by retention of toxic substances in the blood, induces a physical change in the tissues. This first leads to œdema, and, on the other hand, as result of resistance to increased tension in the arterial system, to cardiac hypertrophy. Landeria has shown that injury to the physical properties of the tissue is a necessary condition to the production of œdema.

The writer then gives in detail a series of experiments upon the resorptive power of the subcutaneous tissue in persons with nephritis, with congestion due to cardiac disease, and in healthy people injections under slight pressure of about 50 C. C. normal salt solutions were made in different parts of the body and the absorption watched. The injections were made in cases of nephritis, primary and secondary contracted kidney, without œdema, as otherwise the absorption could not well be followed. The injection produced a hard lump which, spreading, made an œdematous infiltration of the skin.

In the healthy, after some hours the œdema disappeared. In patients with cardiac or local congestion, a slight œdema could be recognized, at

the most two to three days; while in the cases of nephritis, the œdema did not completely disappear until five to ten days. The resorption, therefore, in cases of nephritis is very different from that in people with healthy kidneys. Koranyi's experiments have shown that the kidneys regulate the osmosis of the internal fluids by the products of metamorphosis and reduce the entire blood tension by the removal of these products. His conclusions are that the transudation and resorption of the fluids of the tissue are regulated by the metamorphosis of the tissue and the activity of the kidneys; that the resorption of fluids in persons with diseased kidneys is altered.

The Delirium of Pneumonia.—MARAGLIANO, in a lecture upon the delirium of pneumonia (*Centralblatt für innere Medicin*, 1898, No. 42), corrected some theories formerly current about it. He disagrees both with Portain, who claims that the delirium is an accompaniment, in that infection and intoxication follow in conjunction with each other, and with Aufrecht, that it is a manifestation of the exhaustion of the nervous system.

Pneumonia of the apices is characterized more often with delirium than that of the other lobes of the lung. Pressure upon the vagus or on branches of the sympathetic, or circulatory changes of the cranial nerves seem to be the cause. Arterio-sclerosis is a common cause of the delirium in the pneumonia of the aged.

The delirium is the resultant of two factors — the pneumonic infection which induces the explosion and the modifications of the character of the disease, which act as predisposing causes. These last depend upon the changes in the nutritive conditions of the central nervous system, and in this alcohol plays the most important part. If the delirium depended, as Liebermeister asserts, upon the height of the temperature, then it would not occur in many cases where the fever is low, and if it is, as Naunyn believes, only the expression of an auto-intoxication, then it cannot be explained why it occurs only in a small proportion of the cases of pneumonia.

Tuberculosis of the Parotid Gland.—PARENT, in *Gazette Hebdomadaire de Med. et de Chir.*, September 8, 1898, states that the bacillus may reach the gland either by way of Steno's duct or by the lymph and blood vessels. The points of entrance of the bacillus may be through the mucous membrane of the gums and the tonsils or carious teeth. He divides tuberculous tumors of the parotid into disseminated and confluent. The symptoms of this affection are vague and its clinical course is very obscure. The diagnosis is very difficult and at times can only be made by bacteriologic and histologic examination.

DR. BOCKHORN (*Arch. f. klin. Chir.*, 1898, Vol. LVI, p. 189) observed a case of this nature in a woman, 39 years of age, who came into the hospital with a prominent tumefaction in the region of the left parotid gland; the swelling was practically painless, and its duration had been about three months. Incision into the tumor permitted

the escape of considerable serous fluid, containing what looked like caseous masses of tissue. The unsatisfactory progression of the case necessitated the complete curetage of the diseased gland, which treatment resulted in a total recovery. The microscopic examination of the tissue debris, removed at the second operation, showed the existence of characteristic tubercles, and the presence of tubercle bacilli. The writer parenthetically mentions that only one other such case exists in medical literature.

Treatment of Bronchial Asthma.—N. NOORDEN. Report in *Wiener med. Wochenschr.*, 1898, No. 43. The author recommends the Trousseau method of treating bronchial asthma, which has long fallen into disuse, *i. e.*, with atropine. The treatment should be continued beginning with one-half millegram of atropine, then after two or three days increasing the dose by the same amount, until four millegrams are taken at a dose. Then the dose is as gradually diminished again. A harmful effect of the drug when used in such constantly increasing doses was not noticed, but the physician must constantly be on his guard. The atropine does not affect the asthmatic attack itself particularly, but it prevents new paroxysms for a long period.

A Chemical Antidote for the Venom of Vipers.—By D. C. PHISALIX, *Acad. des Sciences, Paris, January, 1898*. In a series of previous experiments Phisalix was able to demonstrate the efficiency of cholesterine as obtained from biliary calculi in its neutralizing and immunizing properties against the viper's venom. Similar experimentation carried on with tyrosine obtained either from organic or vegetable sources proved it to have extremely marked antivenomous properties of a decidedly more advanced degree than those exhibited by cholesterine.

Suprarenal Opothrapy in Addison's Disease.—By DR. BÉCLÈRE. (*Gaz. Heb. de Méd. et de Chir.*, March 3, 1898.)

Dr. Béclère presented a patient before the Hospital Medical Society of Paris, age 28 years, suffering from tuberculosis, but without any evidence of notable or marked pulmonary lesions. Some months previously this individual had presented a most typical clinical picture of Addison's Disease, but who now was totally free from any evidence of the affection, as a result of the suprarenal opootherapy which was practiced in divers forms: ingestion of the fresh suprarenal capsules, and subcutaneous injection of a glycerinated extract of the adrenals of calves. The treatment was followed by absolutely no untoward effects of any nature but on the contrary resulting in a rapid and progressive amelioration, and finally entire disappearance of all the symptoms of the disease. The author is inclined to the acceptance of the hypothesis which endeavors to explain the good effects of this form of therapy, believing in a compensatory hypertrophy of each portion of the gland which, as yet, remains undiseased, and this resulting in a restitution of the secretory equilibrium.

Tetragenic Anginas.—DR. E. APERT (*Comptes Rendus de la Société de Biologie, February 4, 1898*), in three different cases of Angina, was able to isolate in pure cultures the micrococcus tetragenus:

Case 1. Adult male during convalescence from an attack of acute exudative pleuritis, was suddenly taken ill with symptoms of angina, presenting a singularly characteristic appearance, as though the tonsils and pharynx had been dusted with grains of coarse sand, and to which Prof. Dienlafoy applied the name "Angine Sableuse." Bacteriologic examination demonstrated the presence of the micrococcus tetragenus in pure culture.

Case 2. Adult male, with what appeared to be symptoms of an ordinary acute tonsillitis. Bacteriologically a similar finding was made as that in the first case.

Case 3. Male, acutely taken sick with symptoms strongly suggestive of grippe. The throat showed occasional discrete small white membranous patches, the cultures from which contained an abundance of the tetragenic coccus.

Phlebitis of the Leg Following a Streptococcus Angina.—By Drs. TROISIER AND DECLOUX. (*Gazette des Hôpitaux, February 15, 1898.*)

The authors report a case of this rare and unusual complication of tonsillitis:

Louis N., 19 years old, brought into hospital suffering from a Streptococcus Angina, with swelling of the glands at angle of jaws. Dismissed from hospital five days later completely recovered from throat trouble, but left weak; however, he returns to work and second day after his discharge he suffered much pain in right leg, particularly in region of popliteal space. The leg soon swelled with all characteristic concomitant symptoms of phlebitis. Rest in bed and elevation of limb resulted in recovery. Cultures from the blood remained sterile. Two other cases may be found in literature, that of Trumbull (1890) and that of Dr. Vaquez, published in the "Clinique de la Charité."

An Unusual Case of Gonorrhœal Infection.—COLOMBINI (*Cent. f. Bakteriologie, December 30, 1898*) reports an unusual case of gonorrhœal infection.

The patient, a man of twenty-eight, had at first a seemingly mild attack; early in its course, however, he noticed a swollen gland in one groin, and about two weeks after the attack began this had suppurated and was opened by the physician. Two days later he developed an epididymitis, which gradually increased in severity and was accompanied by marked fever. The epididymis finally showed evident fluctuation and was opened to allow the escape of the pus. About this time the patient began to complain of pain behind the angle of one jaw, and an examination revealed a swollen parotid. The temperature at this time rose every evening, and the urine contained a large amount of albumen, casts and some blood and pus. The swollen parotid gradually increased in size and there was marked œdema of the surrounding parts of the face and

neck. Finally the parotid suppurated, and had to be opened. Following this operation the patient made a gradual recovery; the wounds in the epididymis and parotid region healed, and the urine gradually returned to normal. The gonococcus was isolated from the blood, and from the abscesses of the parotid, inguinal and epididymal regions. The organism had the usual morphological and cultural properties, and produced the disease on being inoculated into the urethra of a previously healthy man. The organism was not isolated from the urine. The author regards the nephritis as toxic.

PSYCHIATRY

Edited by G. Alder Blumer, M. D.

The Treatment of Insanity by Thyroid.—Middlemass reports the results of the treatment by thyroid upon cases in his own wards at the Royal Edinburgh Asylum, supplementing previous communications by Bruce and Macphail. The conclusions are summarized as follows:

1. The thyroid gland contains one or more substances which, on administration, are capable of exerting a powerful influence on the system.
2. In most cases this is evidenced by a rise of temperature, which may reach as much as four degrees above the normal.
3. In a certain number of cases this rise of temperature is very slight or absent altogether.
4. It is at present impossible to predict in which cases the rise will occur, and in which it will be absent.
5. The surrounding conditions as to temperature to some extent influence the reaction.
6. The rate and character of the pulse are affected in every case of thyroid administration.
7. These changes consist in an increase of rate, and an initial increase followed by a decrease of the volume of the pulse.
8. As this is of constant occurrence, while rise of the temperature is not, the effect on the pulse should be the main guide as to when sufficient thyroid has been given.
9. As the drug is cumulative, and is not rapidly excreted, care must be exercised not to push it too far.
10. As a rule, the full beneficial effects are obtained by giving doses of 60 grains a day for six days, though in some, less is sufficient, and in others 90 grains can be tolerated without ill effects.
11. In a few cases, small doses given for a prolonged period seem to produce a sufficient reaction.
12. It is absolutely necessary in all cases, before beginning the treatment, to make a careful examination of the lungs and heart.
13. In cases where phthisis is active, or even dormant, the giving of thyroid always increases the activity of the diseased process.
14. As thyroid also powerfully affects the heart, disease of that organ, especially such as causes irregularity of action, distinctly contra-indicates its use.

15. For the same reason, during administration of the larger doses, the patient ought to be in bed, and remain there for a few days after it has been stopped.

16. Thyroid causes digestive disturbance, which can usually be avoided by giving it in warm (not hot) beef tea, and by placing the patient on light, easily digested diet.

17. After the treatment has been stopped, tonics and extra diet may be given with beneficial results.

18. In a large majority of cases, thyroid also has a distinct effect on the mental condition.

19. In many, it has a distinctly stimulating action on the cerebral cortex.

20. In most cases there is a tendency toward the reproduction of the original mental symptoms.

21. The explanation of the action of thyroid in effecting recovery is still obscure.

22. It is quite clear that the beneficial effect is altogether independent of the temperature reaction.

23. Therefore the initial idea of the treatment, viz., the induction of a feverish condition, is not wholly justified by the results.

24. It is at present wholly impossible to say what the mental result of thyroid treatment will be.

25. It is equally impossible to say in what form of mental disease it will have a beneficial effect.

26. In the series of cases given, the ages of those who recovered were all between twenty-four and thirty-five, and all but one suffered from some form of melancholia.

27. The ages of those who showed decided improvement varied within much wider limits, and age does not seem to be the sole influence of the chances of recovery after thyroid any more than after any other form of treatment.

28. The female sex seems to be more susceptible to improvement after thyroid than the male.

29. The reason for this is still unknown.

30. Even in cases which are regarded as hopeless, thyroid often produces so great an improvement, that the degree of dementia is greatly lessened.

31. In no case was the treatment followed by prejudicial results, provided care was taken to eliminate those suffering from physical disease.

32. It is highly probable that thyroid furnishes a reliable diagnostic of the chances of recovery,—that is to say, if a patient does not improve under thyroid, the prospect of recovery is practically *nil*.—*Journal of Medical Science*, January, 1899.

Hydrotherapy and Balneotherapy in Insanity.—Thomsen, at the meeting of the Association of German Alienists, in Bonn, September 16 and 17, 1898, read a paper upon this subject, and presented the following conclusions (*Centralb. für Nervenh. und Psych.*, October, 1898):

1. At the present time there is no exact science of hydrotherapy in psychoses.

2. All heroic and severe hydrotherapeutic measures are to be avoided in insanity.

3. In conditions of acute excitement, lukewarm baths and the hot pack are of service.

4. In apathetic and emotionless conditions, carefully applied, lightly stimulating measures, such as parital baths, and rubbing, may be used to advantage.

5. In all ordinary cases, the indications for hydrotherapy are purely symptomatic.

The Normal Histology and Pathology of the Neuroglia, in Relation Especially to Mental Diseases.—Dr. W. F. ROBERTSON, of Edinburgh, has compared in a series of cases the cerebral neuroglia of persons who died while insane and those whose death occurred while in sound mind, and found marked microscopic changes. The series consisted of sections from 300 cases of insanity and thirty-one cases from the general hospitals. From his studies he makes the following observations: In the series from the general hospitals, there was hypertrophy of the neuroglia in but three of the thirty-one cases. In the asylum series there was morbid subpial thickening of the neuroglia in 46 per cent of the cases; throughout the first layer of the cortex there was neuroglia overgrowth in 83 per cent of the cases; neuroglia changes in other portions of cortex were rare; overgrowth of neuroglia in the white matter occurred in 51 per cent of the cases. Cases of acute insanity show little or no neuroglia changes.

E. G. S.

On a New Method of Obtaining a Black Reaction in Certain Tissue Elements of the Central Nervous System.—Dr. W. FORD ROBERTSON publishes in the *Scottish Medical and Surgical Journal* a new method of obtaining a black reaction in certain tissue elements of the central nervous system. The tissue, previously hardened in a ten per cent formalin solution, is placed in a one per cent solution of platinum chloride containing five per cent of formalin. The pieces are allowed to remain about three months, or until they become well blackened. The tissue is sectioned in a freezing microtome and mounted in the usual way. The chief disclosures by this method are: (1) The presence of fibres in the walls of the intracerebral vessels, which the author believes to be a specially modified form of connective tissue, occurring only in these vessels, and (2) the primitive fibrils of nerve cells are darkened by the stain. The method also gives a characteristic appearance to the nuclei of the larger nerve cells, rendering it easy to distinguish them from the nuclei of the neuroglia.

E. G. S.

The Normal Histology and Pathology of the Cortical Nerve Cells.—Drs. W. FORD ROBERTSON and DAVID ORR, in an interesting article published in the *Journal of Mental Science* of October, 1898, point out a number of fallacies which may be sources of error in the works of investigators in pathology of the nervous system, particularly in relation to insanity. They assert that the pathological changes in the cortical nerve

cells, known as chromatolysis, and which have been said to be intimately related to acute insanity, frequently occur as the result of both post-mortem changes and senility. In a series of sixteen cases dying of various general disorders, they found these changes present in from ten to fifteen per cent of the cells.

E. G. S.

Progressive General Paralysis.—In the issue of *Le Progres Medical* for 24 Sept., '93, J. Noir reviews an article which Klippel had published in the *Archives Generales de Medicine*, in which Klippel had very clearly stated his conception of Baillarger's disease. He divides general paralysis into three quite distinct groups, as viewed histologically. First, primary general paralysis, the classical type of the disease; second, general paralysis secondary to or associated with other lesions; third, degenerative general paralysis, occasionally with specific lesions.

The primary kind is, anatomically, a diffuse encephalitis of parenchymatous rather than interstitial origin; its starting point seems to be the nervous element itself; its symptoms consist in weakening of all the functions of the brain, and on this trunk of general enfeeblement are grafted the changes in character, excitement, depression and delirium.

General paralyzes of the second class are likewise of inflammatory nature, but there are anterior lesions which modify and complicate the anatomical aspect and symptomatic picture of the malady. They arise in alcoholics, the atheromatous, etc.; sometimes they are manifest in idiots.

Paralyzes of the third group are diffuse encephalitides due to arteriosclerosis, tuberculosis, intoxications, etc., which determine the paralytic syndrome because of the diffusion of the encephalic lesions. Inflammatory paralyzes may arise in the cases of patients of this class, and establish a transition between the second and third groups.

Klippel also insists on the spinal forms of general paralysis and the medullary lesions that they cause: tabetic, lateral sclerosis, bulbar and neuritic. The author concludes by calling attention to the alleged fact that, although cases of general paralysis may be scientifically divided into three classes, these may be correlated by insensible transitions. Finally, according to Klippel, general paralysis arises from infection, from auto-intoxication in action on the nervous centers that have been previously changed in a more or less manifest way.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

The Development of the Operative Treatment of Squint.—At a meeting of the British Medical Association, in Edinburgh, 1898, Professor SNELLEN, of Utrecht, read a splendid paper with the above title.

In its introduction he says there are two currents of opinion concerning this treatment; that some operators desire to confine the treatment as much as possible to the simple tenotomy, as much for the sake of their own convenience as to avoid discomfort to the patient; but that the

result of tenotomy, while cosmetically and functionally satisfactory results may be obtained, may sacrifice lateral mobility of the eyes to an extent to offset its advantages.

Others hold that a sacrifice of mobility is never permissible. Those who hold this opinion would naturally advocate muscular advancement or shortening of both muscles, or some other more radical operation than tenotomy. They prefer such radical operations despite the requirements of troublesome after-treatment, and the possible need to bandage both eyes for more than a week after operating.

The author reviews the history of the squint operations, which, by the way, are not yet sixty years old. Dieffenbach was the first to treat strabismus operatively, and his operation, a myotomy, was first done in 1839. This method resulted in the obtaining of an important cosmetic improvement immediately, but in many cases it was soon followed by insufficiency with increasing deviation in the opposite direction, so that formerly convergent strabismus was simply made divergent.

Dieffenbach, Jules Guerin and von Graefe sought to remedy this defect in an operation; first by means of sutures, inserted in the tendon of the antagonistic muscle, and fastened over the nose with strips of plaster. Finally it was decided that not the muscle, but its tendon ought to be divided. All later methods are based on the principle that the tendon has to remain in connection with Tenon's capsule. All operators that have done many tenotomies have had cases in which the effect seemed to be overdone. Such accidents have led to the replacement by many operators of tenotomies by advancement. Snellen describes various methods, and finally his own. He prefers to operate without chloroform in order that the effect may be observed and modified if necessary. The operation produces little pain, if the cocainizing is done sufficiently early to allow the anæsthetic to reach the subconjunctival tissue. He objects to the pain caused by the pressure of the speculum, hence he prefers to dispense with that apparatus and have the lids of the patient held apart by an aid, who uses sterilized, netted gloves, for the sake of asepsis, and to prevent slipping of the lids. The author describes, for the sake of completeness, a form of strabismus that cannot be rectified by any of the operations above mentioned, and of the importance of which Snellen has only lately become aware. It is the form due to the adhesion of the eye-ball to the orbital wall. The article concludes:

"In order to secure also a functional re-establishment of binocular vision, it is often necessary to combine with the operative treatment exercise and education, in order to restore the lessened muscular force of the antagonistic muscle, and, on the other hand, to awaken the desire for fusion of the binocular retinal images."

Removal of the Tarsus and Retrotarsal Folds in Certain Cases of Chronic Trachoma. — In No. 3 of the volume for 1898 of the *Annals of Ophthalmology*, Dr. CASEY A. WOOD, of Chicago, cites Heisrath as seeking, in the University Eye Clinic at Königsberg, some samples of trachomatous tarsi for histological examination. A strip of tarsal cartilage,

4 mm. wide and 15 mm. long, including the overlying conjunctiva and connective tissue, was removed from the whole length of the convex border. Besides the material for examination that was sought in this way, there was accidentally obtained knowledge of what has since become effective treatment of trachoma.

In Professor Jacobson's report on the strip in question, it was shown that trachoma attacks not only the conjunctival and subconjunctival tissues, but burrows deep into the substance of the tarsus, planting numerous colonies whose activity may persist after the conjunctival foci have atrophied or been removed by operative interference. The excision of the strip in question resulted so beneficially in its effect upon the patient's trachoma that Heisrath was thereby led to excise the tarsus and conjunctival folds in 230 similar cases, which have been reported.

Dr. Wood has operated only lately upon fourteen cases, with the very best results. The cases on which he operated were those in which the lids showed trachomatous infiltration, with granulation deposits in the connective tissue of the retrotarsal folds, whether the cornea was affected or not. The author holds that the operation should be done when the folds are evidently diseased, without apparent thickening of the cartilage, even when the cornea is implicated. He thinks it a very important class of cases, regarded from an operative view-point, wherein, with atrophy or previously existing granulations in the tarsal folds, deeper-seated foci remain in the tarsus. In this form of trachoma, whether the cornea has escaped or not, removal of the tarsus will give gratifying results. He does not advise the operation in the early stages of the disease, where the tarsus is unaffected and the cornea free from disease. The operation is not justifiable in those cicatricial forms of trachoma that have proceeded to shrinking of the tissues composing the conjunctival sac. In such a case there are rarely any active trachomatous nodules in the tarsal cartilage. Nor should the operation be done when it is possible to remove, one by one, the scattered deposits themselves.

The palpebral conjunctiva is rarely the only site of granular deposits in cases of this disease that are of long standing. The tarsus and submucous connective tissue escape only exceptionally, hence excision of the retrotarsal folds (long ago advocated by Richet and Galezowski) is not adequate treatment in such cases. As long as the disease is limited to the conjunctiva and submucosa, *grattage*, the use of forceps, cauterization, etc., are proper, but not when the deeper structures are invaded.

The presence of corneal ulcer, increasing pannus or exacerbation of the chronic disease does not, in Dr. Wood's opinion, inhibit the operation. In such cases he removes the stitches as soon as possible and maintains constant disinfection of the eye while the stitches are in place. The German writers consider cocain a sufficient anesthetic, but Dr. Wood now invariably insists upon general anesthesia. In operating it is essential that the upper lid (which is the one generally operated) be everted so that the convex border of the tarsus is thoroughly exposed. This border is now firmly grasped by two strong-toothed forceps, at the points of junction of the middle with the outer and inner thirds of the tarsal margin,

and drawn firmly upward by an aid. Along the margin of the diseased area an incision is made, through the conjunctiva only, from the outer to the inner canthus. Three stitches are passed through the bulbar margin of the incision, including only the conjunctiva and a few fibres of the submucosa. After placing the sutures, the bulbar conjunctiva is separated, from the globe, to a distance of 5 mm. from the edge of the wound. The forceps are now removed, the lid margin grasped at its middle point, the everted lid resting against a spatula. A second incision, the entire length of, and parallel to, the lid edge, is now made in the healthy conjunctiva. This will be from three to five millimeters from the palpebral border. As little as possible of the unaffected mucous membrane is to be removed. As much as possible of the central conjunctival area should be permitted to remain. The tissues at the nasal junction of the incisions are seized and the conjunctiva and tarsus excised slowly with the scalpel and scissors, carefully avoiding the orbicularis and Mueller's muscle.

It is important to place the sutures so that the two points of incision of each may be exactly opposite when the eye is closed. The bulbar conjunctiva should not be much stretched. There is usually little subsequent pain or reaction. After-treatment is simple and need not interfere with that of corneal ulcer or other complications. Irrigation of the sac with warm boric acid solution, four or five times daily, followed by the instillation of warm, sterilized vaseline, is grateful to the patient and serves well. A tight bandage is put over both eyes, but the patient is not required to remain abed. The sutures are removed by the fifth day. In ten days the wound is usually healed. The sac should be examined for granulation tissue or irregular wound margins. If these are found they are best removed or trimmed by scissors.

Surgical Treatment of Myopia.—In the issue of the *Ophthalmic Record* for the month of October, 1898, Dr. ROBERT SATTLER, of Cincinnati, Ohio, has an article on the surgical treatment of myopia. His conclusions differ from those of the operators who have read before most of our Ophthalmic Societies, especially in that he favors the operation, generally.

The author reports two cases in which immature cataracts were extracted, the patients having, before the formation of cataract, been highly myopic. One of these cases was that of a woman, who, without the use of strong concave lenses, was not able to read, and who had experienced so much difficulty, with them, that she was unable to acquire an education. Ophthalmoscopy and ophthalmometry revealed no abnormalities. She was considered amblyopic as well as myopic. After the crystalline lenses had been removed, it was found that the retina of each of her eyes had normal perceptive ability. The author thinks it was a congenital malformation of the lenses, their transparency being preserved, but different sectors having different indices of refraction.

He states that the operative treatment of myopia has been practiced largely and successfully in Europe. He also states that even at our clinics and hospitals we have not the command of patients that European sur-

geons have; that much explanation of the proposed surgical treatment of myopia is necessary before patients or their parents will permit the use of this method. He explains the infrequency of the application of this method of treatment in this country by the facts just stated.

The article concludes with the report of the author's last case, that of a girl aged 16, who had been under his observation since early childhood. Hers was regarded as a case of congenital myopia with much amblyopia. At the age of eight, glasses, concave by twelve dioptries, were prescribed for her. With these, she had about ten per cent. of average vision. Ophthalmoscopic examination showed only such abnormalities as are usual in connection with myopia; the dioptric media were transparent and healthy. In 1897 the glasses were made each concave sixteen dioptries, with which either eye had about twenty per cent. of average vision. Then the operative treatment was advised by the author and applied. Discissions effected complete absorption of both crystalline lenses, and the very remarkable part of the report is that, after the operations, the right eye was hyperopic by four and one-half dioptries, and the left by five dioptries each eye, with a proper, convex lens, having sixty per cent. of average vision. Lenses were prescribed for distance vision, as well as over-glasses, each of spheric three and one-half dioptries, for near work. With their assistance she reads Snellen's No. 1 readily.

Cassaripe: A New Remedy for the Treatment of Corneal Ulcers and Other Infectious Diseases of the Eye.—In the issue of the *Philadelphia Medical Journal* for the 29th of October, 1898, Dr. S. D. RISLEY has an article on the above-entitled subject. He ascribes to Dr. H. B. Chandler, of Boston, the credit for calling attention to what promises to be a useful addition to our means of treating dangerous and often rebellious ulcers of the cornea, and a large group of cases of purulent disease of the conjunctiva.

Cassaripe is the juice of the black cassava. It makes the renowned West India pepper-pot. Dr. Risley has used it as an ointment of ten per cent.; never stronger. It causes no irritation, however, and he says he sees no objection to employing it in much stronger preparations. The ointment was applied freely between the lids, and the eye subjected to massage so as to distribute the ointment thoroughly in the retrotarsal folds; in the corneal cases, a protecting bandage was applied. When the patients were in the hospitals, this was repeated three times daily; in the out-door cases, morning and evening. No other treatment was employed except the use of atropin and a wash of boric acid. A few minutes after the application of the ointment, in new cases, the discomfort was much diminished, and the improvement was usually rapid, as compared with that due to other modes of treatment. In a case of ophthalmia neonatorum, the eye was thoroughly cleansed, the ointment of cassaripe applied and a supply given to be used three times daily, at home, after the usual wash. In two days the purulent discharge had entirely ceased. Dr. Risley's observation seems to show cassaripe to be a powerful vegetable antiseptic, which promises to be a useful addition to our means of treating infectious forms of ocular disease.

ALBANY MEDICAL ANNALS

Original Communications

For the ANNALS.

NEUROTIC ECZEMA IN FEMALES, PRODUCED BY DISEASED GENERATIVE ORGANS; WITH CASES.

By JAMES M. WINFIELD, M. D.,

Dermatologist Kings County Hospital ; Williamsburg Hospital ; Home for Destitute
Children ; Polhemus Clinic ; etc., etc.

Hebra was perhaps the first to note the occurrence of various cutaneous diseases accompanying disorders of the uterus and its appendages; since his time nearly all writers of text-books have mentioned the possibility of eczema occurring from this cause.

Some three years ago I began a series of studies to satisfactorily establish the question of how much reflexes from the female genitals could do in producing eczema. Most of the patients observed were over thirty years of age, seventy-five per cent. were married, nearly all of these had given birth to one or more children. The general condition of the patients was below par; they were nervous and anæmic, subject to headache and backache, digestion weak, tongue flabby and coated posteriorly. With one exception the eczema was situated on some portion of the face and neck, and was usually of the acute vesicular variety. The eruption ran a rapid course, going through all the various evolutions within thirty-six hours. In many instances it would then remain quiescent until the next menstrual period, when a fresh attack would occur.

The patients who appeared to have any interference with the menstrual function were directed to a competent gynecologist, and in nearly all cases the generative organs were found to be

more or less diseased. Many suffered from retroflexions with adhesions. It is a well-known gynecological fact that uterine adhesions produce more reflex symptoms than almost any other genital disorder.

Twenty-five histories have been collected, but as they are quite similar in the essential points only the more interesting ones will be reported. The gynecological histories of the first four were kindly furnished by Dr. Robert L. Dickinson, and I take this occasion to thank him, together with Drs. MacNaughton and Baldwin, for the interest shown and their aid in helping to place this etiological factor upon a sure basis.

"Case No. 1. Miss M., age 21, had scarlet fever when a child, which left more or less otitis and deafness. Has never been strong, is somewhat anæmic, weight 115 pounds, has had one attack of malarial fever, suffers from dysmenorrhœa so that she is in bed one day each month. For five or six years has had a continuous and profuse purulent leucorrhœa. Examination showed that the entire vaginal portion of the elongated cervix was raw and tender, with a voluminous discharge from the os. Early treatment consisted of applications of nitrate of silver solutions. Carbolic acid applied to the eroded cervix and cervical canal caused an acute outbreak of eczema on the face. Questioning revealed the fact that she had had attacks of eczema before.

The prepuce was adherent and underneath was a large amount of retained secretions. The openings of the vulvo-vaginal and urethral glands were red and gaping.

This patient presented a severe vesicular eczema situated about the angle of the jaw, over the malar prominences and on both ears; although these sites were the ones usually attacked the skin did not appear to have suffered from the repeated inflammations, it was normal in texture and feel. She is still undergoing treatment and is improving under combined gynecological and dermatological care."

"Case No. 2. A strong, muscular teacher, aged 29, rheumatic family history. From the age of 11 has suffered from eczema on various portions of the body, the face having been the part usually affected. Malarial fever at 13. Neurasthenia from 17 to 19, due to overwork at school. Dyspeptic for years. At 16 was said to have had a displacement, for which she wore a pessary; at present she is well nourished, although overworked; is a rapid eater, has

an irritable bladder, due to uric acid; the vesical tenesmus makes her empty her bladder every hour in the day and from six to eight times at night; this condition is pronounced when her urine is acid. A moderate dysmenorrhœa with rather troublesome leucorrhœa induced me to examine her. The cervix was found gaping and cystic, eroded over its entire surface, presenting the appearance of the raw, lacerated cervix of a multipara a few weeks post partem. Such a condition is not altogether uncommon in the virgin or in the nulliparous married woman. Mundé has recently pictured it in the *American Journal of Obstetrics*, and has understated rather than exaggerated the matter. Previous experience having shown that these eczematous patients were difficult to cure by applications, I operated as though for a lacerated cervix, restoring the natural configuration of the parts. The operation occurred in July and the cervix looked normal for four months. She was better in all ways than she had been in a year, and was able to continue her hard work through the menstrual periods. Overwork, however brought back a little of the trouble, and some dysmenorrhœa. In this case iodine and carbolic acid did not produce eczematous outbreaks. Exercise, baths lithia and a regulated diet did a great deal toward keeping her in good condition."

The eczema, which had been more or less persistent for years, cleared up after the operation upon her cervix, and has remained well ever since.

"Case No. 3. An anæmic, and poorly nourished girl of thirty, a sufferer from amenorrhœa and membranous dysmenorrhœa, with a moderate vaginal discharge. Her urine showed 247 grs. of urea daily, for a weight of ninety-two pounds. She was put upon peptomanganate of iron and binocide of manganese, forced feeding and increased quantities of fluid. After a while, the irritability of the bladder not improving, and no improvement in the amenorrhœa, in spite of the lessened anæmic condition, I made an examination and found the following conditions: The cervix, at first glance, appeared lacerated bilaterally, granular over its entire vaginal portion, everted, studded with various-sized cysts and nearly twice its normal size. A voluminous, white of egg secretion poured out of the os, ovaries were large and tender, the broad ligaments probably contained varicose veins, there was some vaginitis and vulvitis. When I saw the cervix I said, "You have had eczema."

In confirming this statement she said she had had eczema about the ears and scalp when a child. Two polypi were removed from the cervical canal, cysts were freely punctured with a fine cautery point, and as she was not sensitive, an 80-gr. solution of nitrate of silver was painted over the cervix. For a special reason, repair work was not deemed necessary. She gained twenty-two pounds in a year, the cervix shrank to its normal dimensions and presented only a crescent of raw surface along the external os. No further improvement can be accomplished by such local treatment; a complete cure can only be accomplished by a plastic operation."

There was some eczema about the vulva as well as on the face, neck and scalp, which improved after the appropriate gynecological treatment.

"Case No. 4. Mrs. E., aged 36, has had menorrhagia and leucorrhœa since her eighteenth year, funnel-shaped pelvis with outlet so narrow that labor was induced at the eighth month, and even then forceps were needed. Five years after this labor she consulted me for an extensive erosion and ectropion of the cervix; it was nearly twice its normal diameter, granular, cystic and bleeding at a touch. An application of iodine and carbolic acid was made to the cervix on the 19th of May, 1896. Four days later she returned with an acute eczema of the ears. I did not connect this cutaneous outbreak with the application until the coincidence occurred again nine months later. Boro-glyceride or ichthyol and glycerine irritate the vaginal mucous membrane, while carbolic acid produces an eczematous reaction in her skin when applied to the cervix; nitrate of silver is efficient and under very moderate treatment at long intervals the parts are kept in healthy condition, cervix having markedly shrunk in size and the profuse chronic leucorrhœa greatly diminished. Cysts had to be opened every three to six months. Menorrhagia was not treated by curetting until February, 1898, after an attack of acute one-sided salpingitis and localized peritonitis; after this the menorrhagia was controlled for a considerable time."

This woman is highly neurotic; in other words, any change of life will produce various nervous phenomena. Generally, however, the skin is the organ that bears the brunt of the attack. Her complexion is fair, skin is thin and very sensitive to atmospheric changes. From past experience she has learned to diag-

nose a beginning uterine difficulty from the irritable condition of her skin. Up to the establishment of menstruation (at fourteen years of age) she had no cutaneous disease except a slight acne. When she was sixteen her ischium was fractured, which narrowed the pelvis; from this accident she dates the beginning of her eczema. About three days before the menstrual period her ears suddenly swell and become greatly inflamed, itching is intense and within six hours the reddened areas are the sites of a marked eczema. The attack usually lasts about three days, subsiding to return at the next period. During the interval between menstruation the skin remains normal. After her uterus was curetted her skin became healthy, she was less nervous and the physical condition greatly improved. Late in the autumn of 1898, she again began to suffer some slight discomfort in the pelvic region, and at once the eczema lighted up.

Dr. Dickinson discovered some cysts about the cervix which he punctured; this relieved both the pelvic trouble and the eczema.

An interesting feature in this and in case No. 1, is the marked idiosyncrasy shown to the action of carbolic acid. In both the smallest amount applied to the cervix would always provoke an attack of facial eczema. The skin also showed a similar sensitiveness to the acid unless it was used in the very smallest quantities.

Case No. 5. (Personal.) In the summer of 1896, Mrs. W., aged 42, consulted me, at the Long Island Hospital, for a severe and obstinate facial eczema. The neck and face were completely covered with the eruption, the skin was greatly inflamed and swollen, itching was intense. There were also a few patches of the same disease on the hands and forearms. She does not remember having had any skin disease previous to the present attack; in fact, was always rather proud of her complexion. Patient was the mother of four living children; no history of miscarriages. Has never had any serious illness and is in good physical condition. The present illness began before the menstrual period, about six months previous to her seeking relief. At first the eruption gave her but little inconvenience, and while it never entirely disappeared it was always more aggravated at each menstrual period leaving the skin a little worse than it was before. This condition continued until it became so bad that she was forced to consult a physician.

In questioning her regarding the menstrual function, the fol-

lowing was elicited: Since the birth of her last child, at forty-one, she began to have considerable pelvic distress, which was greatly aggravated at each menstrual period; previously she had never suffered any inconvenience at this time; a profuse leucorrhœa is present, standing aggravates all the symptoms. She was urged to consult a gynecologist, but refused to do so. The ordinary treatment failed to cure; the disease was simply held in abeyance. She soon ceased coming to the hospital and all trace of her was lost until October, 1898, when she again presented herself for treatment. Her condition was much the same as when first seen, except the skin was thickened, showing the effects of prolonged inflammation, and her pelvic disturbance was greatly aggravated. Dermatological treatment was refused unless she would submit to a gynecological examination. Consenting, she was referred to Dr. Baldwin, chief of the gynecological clinic, who kindly gave me the following notes:

"The uterus is large and flabby, acutely retroverted and bound down by adhesions; cervix was enlarged and eroded; treatment consisted of applications of silver and ichthyol and glycerine to the erosions and gradual replacement of the retroverted uterus."

The skin lesion rapidly improved under simple, soothing applications. When last seen, she was in better condition than she had been for four years.

Case No. 6. Mrs. F., aged 36, has had one child. Consulted me for a vesicular eczema affecting the neck and ears. Had more or less cutaneous trouble at the establishment of the menses. Has had leucorrhœa and considerable pelvic annoyance for the last two years. She was referred to Dr. MacNaughton for examination, who found a retroflexed uterus with an eroded lacerated cervix. The appropriate applications to these parts greatly relieved the pelvic disturbance, and in a short time the eczematous condition showed improvement, which continued until the skin became normal.

These few cases out of the twenty-five collected are sufficient to show the particular class referred to in the title.

Neurotic eczema is recognized as a distinct type, but as the cutaneous disease is simply a manifestation of some reflected disturbance, it is sometimes difficult to benefit our patients unless the various organs capable of exerting these reflexes are carefully examined.

As the diseased uterus and its appendages are the cause of so many reflex nervous phenomena, it would be strange, indeed, if the skin, with its fine net-work of nerve terminals, did not act as the sensitive plate to portray the pathological condition of those organs.

With one exception, some part of the face of the patients observed was the site of the eruption. This is interesting, for it strengthens the theory that uterine reflexes are more apt to exert their influence about the head and face. The neurologist is often called to attend certain types of headache resulting from diseased female generative organs. The dermatologist is well acquainted with the fact that pelvic disturbance is often the cause of acne and other cutaneous diseases of the face.

It will be noted that these eczematous outbreaks were not so much dependent upon the actual diseased condition of the pelvic organs, but rather upon the interference with the menstrual function, arising from those diseases.

The type of eczema was, without exception, vesicular, and in the main acute; each exacerbation occurring at the time of menstruation. Some of the patients had been victims of eczema about puberty, the time that nature was preparing the way for womanhood, and these skins, once the site of eruptive outbreaks, easily re-established the habit upon reflex irritation.

There is no claim made in this paper for literary merit, but it is hoped that it will serve as a guide for diagnosis and correction of diseases remote from the one affecting the skin.

1273 Bedford Avenue,
Borough of Brooklyn, New York City.
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For the ANNALS.

NOTE ON A THIRD CASE OF TUBERCULOSIS OF THE AORTA.

By GEORGE BLUMER, M. D.,

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In the *American Journal of the Medical Sciences* for January, 1899, I reported two cases of tuberculosis of the aorta, and briefly reviewed the literature of this rare condition. The cases therein reviewed could be divided into two distinct classes: (1) those in

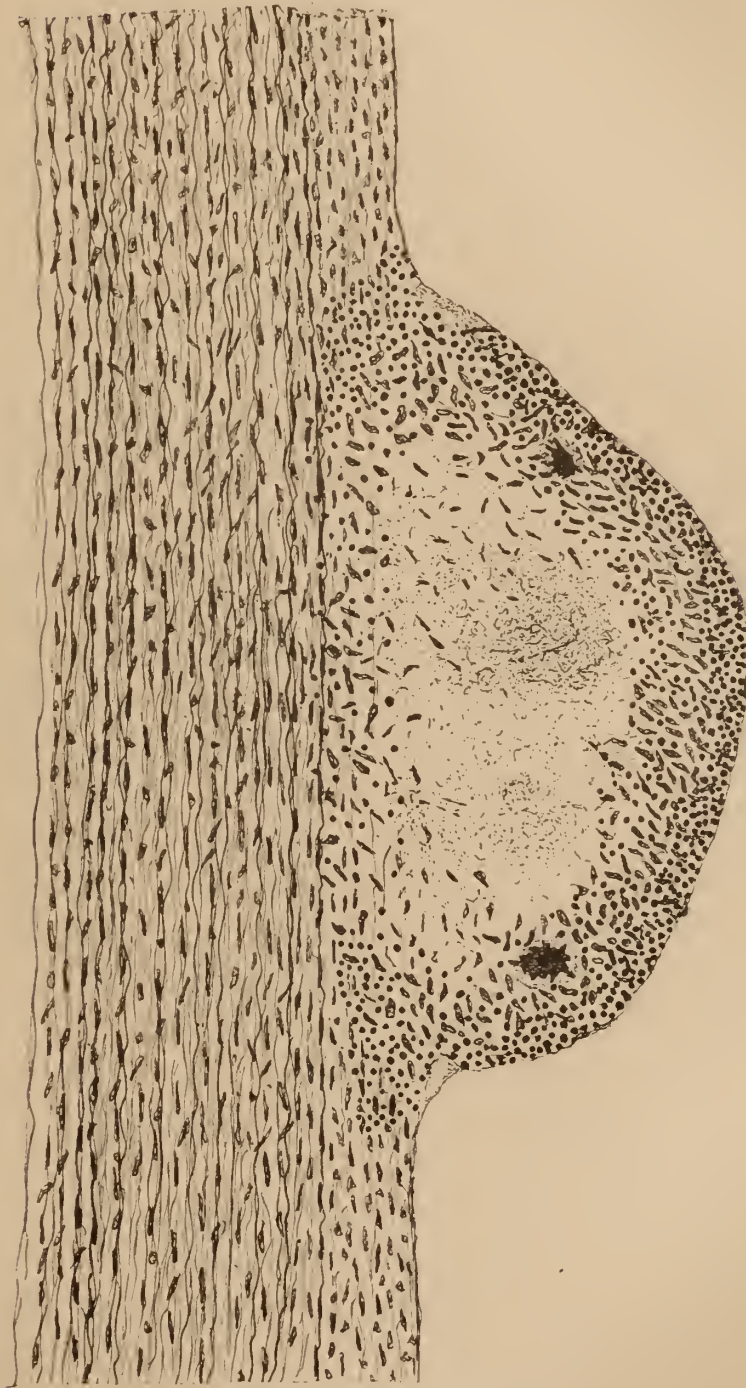
which the tuberculosis had involved the aorta secondarily by direct extension from a neighboring tuberculous process, and (2) those in which the aortic tubercle sprang from the intima of the vessel, and suggested an origin by implantation of infective material. The cases which I reported at that time, as well as those of Weigert, Flexner, Hanot and Lévy, and Stroebe, all belonged to the second group. Since the publication of the paper above mentioned I have had the opportunity of studying a third example of this condition, which, though it resembles in the main the two previously studied, throws definite light on the origin of the tubercles. The case occurred in the Albany County Penitentiary, and I am indebted to Dr. Noble for the opportunity to study it. The patient was a colored man of twenty-eight years of age, who had died with symptoms of tuberculous meningitis. The anatomical diagnosis was as follows: Caseous tuberculosis of the mesenteric lymph glands, and of the cervical lymph glands on the left side. Miliary tubercles in both lungs, the liver and the kidneys. Fresh tuberculous meningitis. Large tuberculous ulcer of the œsophagus. Fresh tuberculous ulcers in the ileum. Tubercle of the aorta.

The following is the description of the aortic lesion: Macroscopic — The aorta is for the most part smooth and normal. On the posterior wall, just two centimeters above the origin of the iliac vessels, is a gray-white, translucent, sessile nodule, projecting into the lumen of the vessel; it is perfectly circular, a little over one millimeter in diameter, and has the appearance of a tubercle nodule. The vessel wall shows no sign of arterio-sclerotic change at any point.

Microscopic:—The nodule above mentioned in the naked-eye description of the aorta is seen as an almost perfectly semi-circular mass attached to the intima by its flat side. It involves practically only the intima of the vessel, though the media just beneath it shows a very slight amount of cellular infiltration. The nodule is made up of a central, non-cellular, pink-staining portion, and a peripheral cellular zone. The central portion, under the high power (Zeiss Oc. 4, Ob. DD), is finely granular, and stains mainly with the eosin; it contains, however, numerous nuclear fragments which take the hematoxylin dye, and a few distorted nuclei. It is confined entirely to the intima. The peripheral zone is made up of long, or irregular, cells of an epithelioid type, and small round

To Illustrate Dr. Blumer's Article,
"Note on a Third Case of Tuberculosis of the Aorta."

Albany Medical Annals, May, 1899.



SHOWING THE TUBERCLE AND THE INTIMA AND MEDIA OF THE AORTA;
THE ADVENTITIA IS NOT REPRESENTED.

Zeiss. oc. 4; ob. DD; reduced $\frac{1}{3}$.

lymphoid cells with deeply staining nuclei; the former predominate where the cellular joins the necrotic zone, the latter markedly predominate at the periphery of the nodule. Between these two varieties of cells are occasionally seen large, irregular, multinucleated cells, their nuclei crowded together in the centre of the cell as a rule, though at times the centre is necrotic, and the nuclei are arranged about the periphery. The cellular zone, in the portion of the nodule implicating the aortic wall, is almost entirely confined to the intima, the only change in the media consisting in the presence, in its innermost layers, of a few epithelioid and lymphoid cells. The endothelial layer of the intima can only occasionally be made out; it does not pass over the surface of the projecting portion of the nodule.

Sections stained with Weigert's fibrin stain show that the greater portion of what seems to be caseous material with the hematoxylin and eosin stain, is a granular or fibrillated material which takes a sharp fibrin stain. This fibrin mass has the same semi-circular shape as the tubercle itself, and the flat side of the semi-circle is seen to be directly flush with the inner surface of the intima. Sections stained for tubercle bacilli show a few of these to be present, at times in the giant cells, at times in or between the epithelioid cells. In one or two places the bacilli form small groups.

The main interest in this case lies in the evidence which it furnishes of the origin of the tubercle. In reporting the previous cases we discussed the possible modes of origin of such tubercles, and amongst other possibilities was mentioned the origin from small parietal thrombi. Although we were then unable to prove such an origin, it would seem that the evidence in this case is strongly in favor of it. Almost the whole central mass of the tubercle was made up of fibrin, and the shape of this fibrin mass, added to the fact that its flat side was on a level with the inner surface of the intima, as would be expected were it a thrombus, makes it almost certain that it was one. Although Falk has described fibrin formation in tubercles during their development in various parts of the body, it can hardly be supposed that the fibrin present in this case originated in this way; both its appearance and amount are quite at variance with anything found by this author; in fact, in many instances he had to search very carefully in his tubercles to find any fibrin at all, and never found it in compact masses, as it occurred in this case. It seems likely

that all the cases of aortic tubercle of this class originate in parietal thrombi, the fact that this has not been previously demonstrated being possibly due to the occurrence of degenerative changes in the fibrin which had altered its staining reactions. The cells found in the peripheral zone of the portion of the tubercle projecting into the aortic lumen, probably originate, as Flexner suggests, from the blood itself.

THE NERVOUS SYSTEM IN THE PATHOGENESIS OF ALBUMINURIA.*

By J. H. BROWNLOW, M. D.,

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The obscurity surrounding many of the more common diseases, met in everyday practice, has been removed by the light of modern medical research during the last decade of the nineteenth century. However, there exists a series of complex symptoms exhibited during the progress of well-defined pathological lesions in the renal organs and arterial system, which have received the name of Bright's Disease, from the investigator who first classified them, that are still surrounded by obscurity and of questionable origin.

The purpose of this paper is to bring succinctly before the society the generally accepted etiological factors in acute and chronic Albuminuria, and examine them with the incentive to determine the reliability of their alleged pathogenic potencies; and then direct your attention to the nervous system, as a possible, if not highly probable, active arcane factor in the development of that complex and undetermined series of symptoms, so familiar to us all, called Bright's Disease.

In grouping the etiological factors, the authorities usually place cold first, and most prominently, as an active causative agent in the development of acute nephritis; especially sudden and marked changes of temperature, repeated wetting and chilling the heated body; burns or any other lesion which might destroy or materially impair the functions of large portions of the skin. They group all other causes under the head of the direct specific action of

* Read before the Medical Society of the State of New York, February 1, 1899.

noxious substances on tissue elements of the kidneys. Different poisons, and among them the remedial agents, cantharides, turpentine, carbolic acid, and other irritant diuretics, are included. But by far the most prolific cause of acute Albuminuria is the morbid condition of the system, the sequel of some of the acute infectious diseases. Chief among these is scarlet fever. The severity of the epidemic is no indication of the renal complications that follow. Diphtheria is regarded as only second to scarlet fever in producing acute Albuminuria. But unlike scarlet fever, it is as a rule only developed in the more severe cases of diphtheria, and when the diphtheritic processes are at their height. Malaria, surgical and puerperal fever, carbuncle with septicendocarditis, are all assigned by leading authorities as active causes in the development of acute Albuminuria.

In the chronic form, many of the alleged causes of the acute are included; but others are assigned, and it is deemed essential to state them briefly. Age, according to most authorities, is given the primary position among the causative agents in producing the chronic form. However, it may be stated it is seen at all ages, and is most common between the ages of forty and sixty. Cold, repeated chilling of the body, and imperfectly ventilated houses, are given as the most common causes.

Bartels, Atkinson, Keiner, Bussy and many other authorities affirm that malaria is one of the chief causes of chronic Albuminuria. Other eminent authorities include rheumatic affections, syphilis, phthisis, gout and alcohol. Dickinson holds that hereditary tendencies exert a pronounced influence in the development of the chronic form, particularly in families in which the arteries tend to degenerate.

Osler regards lithæmia as an active cause, and with it he groups the intense worry and strain of business, with rapid and over-eating and want of out-door exercise. He also asserts that alcohol and syphilis are contributive, if not active factors in its production. Purdy adds to the active causes the cold moist regions of the Northern States.

These practically constitute the chief etiological factors recognized by the leading authorities, in both acute and chronic Albuminuria.

However, in the final summing-up of the causes, perfect accord exists on this point: that in many of the cases the true cause is

unknown. With such a frank confession, it is pardonable to call in question the correctness of the alleged causes. Certainly these are not sufficiently clear, direct, and convincing that they should be unquestioningly accepted as reliable and final. It cannot be claimed that they reasonably account for the origin of Albuminuria, and the pathological conditions associated with it.

First, consider the alleged causes: cold, wetting and chilling the body. From our knowledge of the physiological action of cold and repeated chilling and wetting of the body, which might possibly occur in the ordinary vocations of life, can it be possible to conceive that cold and its concomitants *alone* ever produced a case of acute or chronic Albuminuria? Cold, with its ever-present, false, distorted, and undetermined envenomed terrors should, I believe, have no recognition as a causative factor in either the acute or chronic form of the disease. On the same principle, the cold moist regions of the Northern States, which Purdy claims as active in causing Albuminuria, cannot be accepted as reasonable or consistent.

The position accorded to malaria by Bartels, Bussy and others in the production of chronic Albuminuria is regarded as exceedingly doubtful by some authorities, and I believe with perfect consistency. If malaria were an active causative factor in the production of this disease, would the hundreds of thousands of sufferers from malarial poisoning and malaria all over the southern and western portions of this continent be almost entirely exempt from its insidious attacks, when it is well known that malarial poisoning is a potent agent in devitalizing and predisposing the system to disease, particularly in advanced age?

My personal experience in the examination of 712 males who had chills and fever, or were suffering from malarial poisoning, and all of these between the ages of 38 and 70 years, shows but three cases of chronic parenchymatous nephritis, and two out of the three had a more apparent cause than could be ascribed to malaria. The inference is consistent that these three cases were concomitant with malaria and not caused by it. On this point Osler is the only authority whose experience corresponds with, and confirms my own. He states that during seven years, in which several hundred cases of malaria were treated, not *one* case of Albuminuria came under his observation that could be regarded as arising from malaria.

It is conceded that among the alleged minor causes authoritatively assigned in producing Albuminuria, gout, rheumatic affections, syphilis, phthisis and alcohol, may possess predisposing tendencies, but are all wanting in the essential elements of active causes.

Practically speaking, it is the unanimous opinion of the authorities that the specific poisonous products of scarlet fever and diphtheria act directly upon the tissue elements of the kidneys, causing inflammation of these organs, and resulting in acute or chronic albuminuria.

Does not this theory conflict with well-established principles that authoritative opinion can in no wise invalidate? The kidneys, according to anatomical structure and physiological functions, are perfectly designed and pre-eminently adapted and efficient in meeting and performing their specific work, their well-known function being the secretion and excretion of the effete and poisonous products from destructive metabolism. In accomplishing this special work they are inured to contact with poisonous products and even the specific poisons of acute infectious diseases. It is therefore unwarranted and illogical to contend that the inflammatory processes and pathological conditions found in the kidneys are primarily due to the direct action of these specific poisons.

But in consonance with well-known principles we should look to more susceptible and highly organized cells and tissue elements for the arcane pathogenesis from which the grosser and more apparent renal and arterial lesions result. In the highly organized, complex and sensitive nerve cell or neuron of the central, spinal and vaso-motor systems, I am impressed it is to be found.

Each and every function performed in the animal economy is primarily dependent upon the integrity of the cells constituting the organ. A departure from it is the initial stage of every morbid process. In proportion to the complexity and higher organization of the cell formation, so will be its susceptibility to irritants, abnormal conditions and toxins.

The nerve cell or neuron is the most highly organized and susceptible cell of the body, and is therefore more closely and completely dependent on normal surroundings and upon the source from which its nutrition is derived than any other. And unlike all other cells its food supply must be continuous or its constant

energy-delivering power is at once impaired; and when that results, the degeneration of the nerve cell has begun, and the tissues, depending on a supply of normal food elements which are conveyed to them by the blood and lymph, at once exhibit a departure from a normal condition, to be immediately followed by gross pathological evidences.

The highly important functions of the vaso-motor system in the maintenance of not only the integrity of the tissues in which are revealed the grosser lesions found in Albuminuria, but in the neuron itself, have not been adequately appreciated and fully realized. The influence of the nervous system on metabolism is dual. It acts indirectly upon the blood-vessels, and controls the amount of blood supplied and affects its pressure. It is more than probable, the special nerves, the trophic nerves, materially influence the metabolism or nutrition of the tissues. That these nerves do influence directly the transformation of matter within the tissues by stimulation of nerve centers after cessation of the circulation is generally admitted, and has a direct bearing upon the point under consideration.

All of the numerous, I might say endless, experiments upon the kidneys teach most positively that disturbances in their circulation produce immediately functional derangement, and, if continued, organic lesion. Whenever the volume and rapidity of the blood current fall below that which is necessary for the nourishment and life of the epithelium covering, the glomeruli and tubes, albumen appears.

Over-stimulation, irritation or lesion to portions of the floor of the fourth ventricle of the brain or fibers passing from its immediate vicinity, at once affect the circulation of the kidneys; and if persistent and severe, is quickly followed by all the pathogenic evidences of acute Albuminuria. In the initial stage, particularly in the chronic form, our attention should be early directed to the nervous system, if we may hope to arrest its development. Indispensable to success in the treatment of the disease is a correct knowledge of its etiology and pathology. The prodrome of parenchymatous and interstitial nephritis evidence themselves in a most direct and positive manner in disturbances and derangements of the whole nervous system. At every stage, from the initial until the final termination, the varied series of nervous manifestations, renal and arterial pathological conditions, if properly interpreted,

clearly and unmistakably point, in my opinion, to a nervous origin.

The inferences I am induced to draw from this brief and imperfect review are as follows:

That all the alleged causes of acute Albuminuria, with the exception of the toxins of scarlet fever and diphtheria, are devoid of specific pathogenic power and should not be accepted.

That the opinion of leading authorities that these toxins primarily act on the tissue elements of the kidneys, causing inflammation of these organs and resulting in acute or chronic Albuminuria, is unwarranted, and controverted by anatomical and physiological principles.

That in the highly organized and susceptible nervous system, with its primary, perpetual and controlling dominion over metabolism, is to be found the primary morbid process from which all the other grosser lesions are the direct result.

That as in acute albuminuria the true etiological factors are the *toxins* of scarlet fever and diphtheria, so in the chronic form *auto-toxins* are the active pathogenic factors, and their specific action is primarily evidenced on the nervous system.

That severe mental strain, intense worry, deep and profound sorrow, the silent grief of domestic and financial misfortune, are the most active predisposing causes in Albuminuria.

That the obscure and constant nervous manifestations are more reasonably accounted for on this theory than upon any other.

That the pathological conditions found in the renal organs, arterial system, brain, spinal cord and sympathetic ganglia are local manifestations of a deranged and diseased nervous system, developed by auto-intoxication and resulting in deranged metabolism.

WEAK HEART.*

By C. M. REXFORD, M. D.,

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To restate old facts is sometimes not wholly useless. Discussion of an old subject may prove to be valuable. Yet it seems a hopeless task to attempt to say anything new about disorders of the heart. The best minds in the profession have given the subject

* Read by title before the Medical Society of the State of New York, February 1, 1899.

the most careful attention and have reached conclusions concerning it which seem to be ultimate. It has appeared to the writer, however, that something might still be said about it, and that some parts at least of the topic might still be reviewed without absolute waste of time.

Manifest heart disease indeed receives due attention. It is proposed in what follows only to urge the importance of the early recognition of any heart weakness whatever with a view to the prevention of serious results and a cure of the disordered state when that is possible. Like many other ills, heart disease may take its rise from very small and obscure beginnings. Leaving out of consideration gross anatomical defects as hopeless, it can be said to exist as an inherent weakness, it may appear as an acquired weakness, it may result from inflammatory disease, and it may occur as secondary to disease changes in other parts of the body.

No one questions the fact that the heart frequently fails from weakness to perform its functions properly. It is quite the fashion in these days to speak of the changed type of disease, and to assert that instead of meeting sthenic cases of illness we are called upon to treat mainly those which are asthenic in character. Whether or not there is any basis for such a belief it is quite true that depression of vital strength must very frequently be contended with, and that lowered vitality often finds expression in disorder of the heart action.

It is not the purpose of this paper to study valvular lesions, or to speak much of the gross anatomical changes which follow inflammatory diseases of the heart, but rather to allude to some other cardiac abnormalities less marked by decided symptoms, often obscure and perhaps little regarded, but full of possibility of evil consequences. To say to a patient who complains of discomfort in connection with the heart, but offers no symptoms of serious organic impairment of that organ, that the trouble is merely functional and of no importance, is not to tell him the whole truth and not to do a physician's whole duty. There was a time, and that not so very long ago, when the study of murmurs was about all there was of the question of heart disease, and these determined prognosis and decided treatment. Then more attention came to be given to the valvular changes which caused the murmurs, and last came the knowledge that the con-

dition of the heart's cavities and its muscular walls was after all the thing which was of the most consequence. In other words, it is agreed that the question is principally, how strong is the heart, and how much ability has the cardiac muscle to do the work required of it. Further, it can be safely said the cause of heart failure is not chiefly valvular lesion, but weakness of the myocardium.

Now, to speak of heart failure is to use a somewhat derided term. Perhaps the phrase has been misused. At any rate some have held its use to signify uncertain knowledge and feeble diagnostic ability on the part of the observer. It may be so. Nothing is more desirable in medicine than definite knowledge and accurate statement of facts which have been carefully ascertained. But the phrase is a convenient one, and it must be held to be not infrequently more clearly illustrative of the actual condition than any other. For the present purpose it is especially serviceable because it emphasizes that part of the subject to which attention is meant to be directed.

Whether there is such a thing as serious functional disease without organic lesion seems difficult to understand and is perhaps a matter open to discussion. That functional troubles lead to those which are organic and plainly serious is a matter of more immediately practical importance. If the heart develop an inability to do its work well, without any discoverable lesion of any of its parts appearing, the difficulty will demand just as careful attention whether it is called organic or functional. For a heart which has begun to fail in strength may fail seriously if the cause is not discovered and removed, or it may get a serious lesion from an overstrain which might have been avoided. The idea that the heart may be weak long before it is crippled demands painstaking in diagnosis and a view of a given case which goes beyond the heart itself and looks for causes which often lie quite outside of it. The treatment of advanced disease is often unsatisfactory enough. This is quite as true of heart troubles as of any others, while none will better repay the early and watchful care which they demand.

It must never be forgotten that all hearts are not equally strong. In some persons that organ is never strong, but performs its function always with difficulty. It has been said and often quoted that a man is as old as his arteries. It is doubtless equally true that a man is as strong as his heart. So it is that in some the central

organ of the circulatory system is naturally equal to all reasonable demands which may be made upon it, while in others it is inherently weak and quite unable to go beyond a certain limit without danger. If there must be limitations of capacity for activity it is well to be aware of them. It is better for a man to know his weakness than to know his strength.

The heart gives evidence of its strength by its ability to limit the rapidity of its beat. Violent muscular exertion or nervous excitement will greatly increase the frequency of its contractions; but this excited action is produced in some much more easily than in those who possess normal heart strength. This rapid beat, or palpitation, a rapid stroke of which the individual is conscious, is often one of the first signs of cardiac weakness. While it may be due to indigestion or some such simple cause, it is apt to signify an abnormal irritability of the heart itself and so is worthy of attention, especially if it persists in spite of appropriate treatment of the functions of the digestive tract.

Tachycardia, or heart hurry, is a more important symptom. It is of course not uncommon in the later stages of chronic valvular disease, but it also occurs when no such disease is present. It is liable to occur in cases of nervous break-down, of heart strain, of dilatation of the heart cavities, and from the excessive use of alcohol, tobacco and even sometimes of tea and coffee. It is likely that these substances paralyze the vagus nerve and so prevent its inhibitory action upon the heart. In this condition, which may be paroxysmal or become persistent, the patient is often not aware of his rapid pulse which may reach 180 or more. He is more apt to complain of the dyspnoea which attends it than of the trouble itself. In such a state the heart sounds are weak, but the pulse, though feeble, is regular.

Intermittent heart beat occurs also in cases of heart weakness. Its import is certainly less serious than that of heart hurry, for many persons have it for years without apparent harm. It is, however, always a warning sign of something wrong with the heart, and when exertion induces it, or it occurs in the course of acute disease, real significance must be attached to it. Irregular or unequal pulse is still more important than an intermittent one. It signifies weakness of the myocardium or nervous irritability. Brachycardia, or slow pulse, while normal in many, may be a sign of heart failure. Cardiac pain, dyspnoea, heart murmurs and

œdema of the extremities are well-known symptoms of progressive failure of the power of the heart to perform its function.

It is known to everyone that diseases of the heart are to be considered as either primary or secondary. The first have their origin in some portion of the mechanism of the heart itself, those of the second class are induced by disease in some other part of the body. The prognosis and treatment of any case notably depend upon its etiology. But whatever the cause, or wherever the difficulty originates, the progress and the gravity of the disease will depend much upon the inherent strength of the heart. In one a serious lesion may remain stationary for an indefinite time, in another of less resisting power the downward course may be extremely rapid.

A case recently seen may be here briefly alluded to. A man past fifty years of age, a brain worker of unusual ability, had never had any illness but had never been physically very strong. He had always had occasional attacks of syncope. With the exception of the heart he had no organic disease. An attack of fainting following a period of overwork led him to seek advice. He was found to be suffering from extreme tachycardia and severe dyspnœa. There was no evidence of any organic change in the heart or arteries. After remaining for some weeks in an extremely grave condition, he slowly improved, but another attack of fainting proved fatal. Upon examination the heart gave no evidence of any lesion of the heart or coronary arteries.

Most cases of heart weakness, if the trouble is neglected, result soon or late in thinned walls and dilated cavities. This condition nature seeks to compensate by increasing the thickness of the muscular walls and often succeeds admirably in doing so. But this does not at all times happen and the condition must always be regarded as a serious one. To meet it on its earliest appearance, or to anticipate it would be ideal treatment.

To speak of some of the causes of dilatation, it is to be said first that malnutrition and anæmia frequently produce it. The heart being compelled to work without ceasing, must always be able to obtain its proper nutriment or it cannot maintain its vigor or its integrity. Young persons who have not yet attained their growth are liable to suffer in this way. Overworked and poorly nourished adults get dilated hearts from the same causes. Dilatation occurs as the result of the softening of the myocardium

occasioned by acute diseases, such as fevers, and it is the result of enervation of the heart from various diseases and from the abuse of alcohol and tobacco. Some of the cases seen as the result of the misuse of these drugs are extremely serious and very difficult to relieve.

Dilated heart is a common result of excessive muscular exertion in previously healthy young men. A warning is needed in this direction. When the late war caused many young men to be examined as to their physical fitness for soldiers not a few were found to have overstrained their hearts. These were usually those who employed themselves frequently with athletic exercises. Most or all of these are bicycle riders. So excellent a means of procuring healthful exercise and pleasure ought not to be misused.

Physical exhaustion, mental fatigue and an undue burden of care and anxiety are causes of heart failure. Brain tire can cause bodily exhaustion. The result of these influences upon the nervous mechanism of the heart is to produce in it a state of exalted irritability so that it can no longer perform its functions in a quiet and orderly manner. The heart beat is thus disturbed, and palpitation, pain and other symptoms of weakness follow. Such changes once induced show a decided tendency to become chronic and if they do not always become directly dangerous to life they decidedly lessen a patient's chance of recovery from any severe disease. It is likely that further study of the pathology of nervous diseases will show in such conditions actual structural changes in the nerves involved. Indeed, such changes would seem, especially by the method of Nissl, to have been already demonstrated.

It must suffice simply to mention some of the secondary causes of dilatation and heart failure. These are valvular changes, arterial sclerosis, renal disease and atheroma of the aorta and coronary arteries. It would lie quite outside of the present purpose to enter upon any discussion of them.

Treatment of weak heart must seek to relieve present symptoms and it must also have for its object the prevention of a more serious condition. The cause must, if possible, be removed and the patient's whole system made as nearly normal as may be. In many cases hygienic measures alone will suffice. Rest, exercise in the open air and proper food are often all that are needed. When a physician finds a patient suffering from some heart disorder it is likely that the first medicine he thinks of is digitalis.

Perhaps this is no discredit to him, and it certainly is a tribute to one of the most valuable of medicines: He is a wise physician who knows just how to give digitalis. It is certainly unwise to use it when the heart is tired because it is working against an obstacle. If the arteries are congenitally small, if they are sclerosed, or if from any cause there is arterial tension, digitalis can only do harm, for it makes the contraction of the arteries worse and increases the labor of the heart. It is, however, the best remedy in dilatation. If contraction of the arteries is present it can be overcome by nitroglycerin, which is the best of the vascular dilators.

Nothing can be more true than the statement that two remedies are needed in every case of heart disease and that these are iron and oxygen. Without oxygen the muscular system is powerless. Its growth and activity are the result of oxygenation. If the heart muscle is unable to maintain its nutrition it will lose strength and will yield under the strain of carrying on the circulation. Iron, being the oxygen carrier of the blood, is the remedy which is able to counteract the debility and anæmia which are usually present at some time in all cases of heart disease. In the cases of general debility, which always show debility of the heart muscle also, digitalis will often serve a useful purpose by assisting the heart to nourish its own walls through its own blood vessels. Arsenic and strychnine often prove useful.

Many of the most difficult cases of heart failure are seen in the person of those who have become neurasthenic from overwork, worry and similar causes. They often present most distressing symptoms of disturbed heart action. The pulse is small, feeble and irregular, or it may be very rapid. The heart sounds are very faint. Paroxysms occur in which there are dyspnoea, faintness and precordial pain radiating through the chest and extending down the left arm. Such a condition may result in a persistent tachycardia. Treatment is not always satisfactory. It must be directed mainly to the restoration of the health of the general system. Heart tonics may be necessary, but rest, change of scene, hydrotherapy and similar measures must afford the main reliance.

Excessive use of tobacco and alcohol affords a good many cases of irritable heart which finally, if the exciting cause continues in force, becomes dilated and places the patient in a serious condi-

tion. There is indeed no safety for an individual in such a state except to withdraw gradually and finally the cause of his difficulty. If the trouble has not already advanced too far, full doses of strychnia, and proper hygienic means will usually restore the heart to a state which will remain nearly or quite normal.

In no place is good heart strength more needed than in acute disease. Effort should always be made to conserve it as much as possible. It must be said that it is too much the custom to prescribe the synthetic antipyretics and analgesics in all conditions attended by fever. These remedies doubtless have a certain use and value, but their depressing effect upon the heart is sometimes too little considered. In such a disease as epidemic influenza, which notably depresses the nervous system, the coal tar products can do much harm, especially in the old and feeble, or when such complications as bronchitis or pneumonia are to be feared.

In fevers, and especially in pneumonia, care of the heart is all important. The great danger in pneumonia is from heart failure. The toxic effect of the disease and the high temperature soften the myocardium and produce progressive weakness and dilatation of the organ. Depressing remedies ought to be avoided, while effort from the first should be directed to the purpose of sustaining the muscular and nerve strength. The processes of digestion and elimination are to be cared for and the patient kept quietly in the recumbent position. It is well to give strychnine in full doses from the first. Few are willing to omit the use of alcohol when the heart begins to show signs of failing, but it may be withheld until plainly needed. Strophanthus is a better remedy in pneumonia than digitalis when a heart stimulant becomes necessary. Spartein, caffeine and nitroglycerin sometimes prove to be useful.

Treatment of the heart conditions which have been alluded to in this entirely inadequate manner, namely, those conditions which are characterised by weakness rather than by valvular lesion, is believed to be in the main hygienic quite as much as medicinal, and properly to be directed to the general condition of the patient quite as much as to the special. No attempt has been made to consider so large a subject with anything like completeness. What has been written has been largely meant as a plea for early and accurate diagnosis of disorders of the heart function, and a proper appreciation of their importance. Heart weakness means possible heart failure. It is probable that soon there will be no such thing

known as a functional disease, and surer knowledge will enable us better to appreciate disorders in their inception. More and more, medicine is to become an agency for the prevention of bodily ills, and its most useful work will be less that of trying to cure fixed disease than that of seeking to guard against it.

STRANGULATED HERNIA; ENTEROTOMY.*

EXCISION OF THIRTY INCHES OF INTESTINE.

By W. L. CUDDEBACK, M. D.,

Port Jervis, N. Y.

Raffiel Farrat, single, 27, Italy, laborer. Admitted to the Port Jervis Hospital, 4 P. M., February 17, 1898, with the diagnosis of Strangulated Inguinal Hernia, and the following history:

About February 7, 1898, while lifting heavy lumps of coal from a car, he felt a severe sharp pain in the right, inguinal region, and a small swelling appeared in the groin at once. This was followed by a continued soreness and pain at the seat of injury which at times became quite severe. He was able to continue at his work several days. On February 17, the pain and swelling increased so rapidly that he called on Dr. H. H. Robinson, of Goshen, N. Y., for assistance. The doctor immediately sent him to our hospital, with the opinion that an immediate operation was advisable.

On arriving at the hospital, an examination revealed a tenderness and fullness which was soft and compressible, in the region of the right inguinal canal. The right external abdominal ring was open and enlarged. There was no tumor or hernial protrusion or other symptom of hernia, and the patient appeared quite comfortable. He was at once placed under observation in bed. He passed a rather restless night, and the next morning complained of some pain and soreness through right side of abdomen. During the day these symptoms increased rapidly and tympanites developed. The patient became sallow, weak and prostrate, the pulse increased to 120; the temperature at noon, 100°. Anxious expression of countenance developed, and he was evidently fail-

* This case is offered as illustrating complete and permanent recovery after removal of a large area of the digestive tract, and other interesting and unusual complications. Read before the Medical Society of the State of New York, January 31, 1899.

ing rapidly. Explosive vomiting of greenish-brown faecal matter developed at 2 P. M., respiration, 24 and labored, temperature 101°.

An examination of the abdomen disclosed a hard circumscribed mass in the right iliac fossa, surrounded by a tympanitic zone, and considerable abdominal tenderness. At 3 P. M., ether was administered and abdominal section was made directly over the tumor. Underneath the peritoneum there was found a circumscribed semi-solid, black, offensive mass about four (4) inches in diameter. Gauze pads were placed in the abdomen, and an effort was made to raise the mass from the abdominal cavity. This effort was not successful. It was then detached from the surrounding tissue, when section of its sack revealed gangrenous small intestine of consistence and appearance of old blood clot. The gangrenous intestine was then withdrawn from the abdominal cavity until the healthy portion appeared at each end. The line of demarkation was very abrupt and well defined at the seat of the stricture, throughout the adjacent mesentery and at each end of the constriction of the intestine. The mesentery was then tied through in a series of loops with strong twisted silk ligature just within its healthy portion. Section of the mesentery was then made with scissors between the ligature and the line of strangulation.

The gangrenous portion of the intestine was then ligatured firmly at each end and its contents forced away from the point of section. With the healthy portions of the intestine in the hands of skilled assistants, section of the intestine was then made as close as possible to the line of demarkation, each assistant holding firmly and retaining the divided ends of the intestine without relaxing his grasp.

A third assistant had the small round Murphy-button in readiness, and together we adjusted each section of it in its position within the severed end of the intestine. We then fastened the sections of the button together. After this, assistants 1 and 2 relaxed their grasp, when there was formed a perfect coaptating line of serous peritoneal coating around the gut, surrounding the button. Lembert sutures were then used over the outer convex portion of the intestine.

The gangrenous sack was then excised and its adhesions dissected and broken up. The gauze pads were then removed; the intestine was thoroughly cleansed and replaced in the abdominal cavity, and the abdomen irrigated with hot saline solution, a por-

tion of which was left among the intestines. An iodoform gauze tent was then left deep in the wound. The peritoneum and the muscular layers of the abdominal wall were sutured separately with a continuous catgut suture, and the skin with antiseptic horse-hair stitches.

The patient was under ether one and one-half hours. Small intestine resected measured thirty inches in length. The patient's condition improved under the ether. After the operation, pulse, 142; respirations, 24; temperature, 100.2-5 degrees. Strychnia, nitroglycerine and morphia were used hypodermically as needed. During the next four days, pulse ranged 120-140. The highest temperature, 101 degrees, was reached in the afternoon of the nineteenth. At the first dressing, February twentieth (the third day), the gauze tent was removed; there was no tympanites, no pain; free watery discharge soiled the dressings; 1-10 grain calomel tablets were administered, one every half hour for ten doses. Hunyadi water was then given in small divided doses. Milk diet exclusively. Milk in small quantities was retained and relished.

February twenty-first, free catharsis without pain, dark brown stool well formed. After this, Hunyadi water, in small quantities, was used daily, causing relaxed movements. The wound was dressed daily, there being a free discharge of offensive, bloody, brownish pus.

On February twenty-sixth (the eighth day), pulse and temperature became normal and remained so afterwards during convalescence. Other food was now retained. The abdomen was markedly retracted. On the twenty-eighth (the eleventh day), the Murphy-button was discharged through the rectum with semi-solid, slightly bloody stool, without pain or distress.

The patient made a steady, uninterrupted recovery, at times complaining of pain after eating. He gained about fifteen pounds in weight. The external wound healed kindly. He was discharged from the hospital, entirely recovered, April twenty-first.

In November, '98, eight months after the operation, the patient is reported hale and hearty and at heavy manual labor with others of his race, with no hernia remaining.

The points of especial interest of this case were:

1st. The hernia, strangulated by the constriction of the peritoneal covering, was returned en masse into the abdominal cavity unassisted.

2d. Relief from symptoms of strangulation continued twelve or fourteen hours after the return into the abdominal cavity of the hernia which was still strangulated.

3d. The rapidly developing collapse of the patient was relieved during the operation.

4th. The large amount of the intestine involved, thirty inches of the small intestine being excised.

5th. The sack as well as the intestine had become gangrenous, and was completely removed.

6th. The complete success of the use of the Murphy button.

7th. The large increase in the weight of the patient during the convalescence, indicating that the remaining portion of the intestine thoroughly assimilated the food.

Correspondence

GYNECOLOGY IN MUNICH.

MUNICH, BAVARIA, *March 5, 1899.*

Munich, being the largest city and also capital of Bavaria, naturally attracts the best surgeons of southern Germany, and is known among gynecologists as the home of Von Winckel, one of the most celebrated gynecologists of the day.

Another gynecologist in Munich not yet so celebrated, but who is rapidly coming to the front, is Dr. Klein. In time he bids fair to be as famous a man as Von Winckel. He is at present one of the assistant professors at the university and is liable to be called to a full professorship at any time, if not here, then at some other university.

At the present time he is president of the "Munich Gynecological Society," and through his courtesy I was invited to attend one of their meetings and was very much interested in it. First a paper was read by Dr. Nassauer on the treatment of hemorrhage from the female genital organs (further experience with the use of styptics). Second paper by Dr. Brünings ("Over a Fibro-Myoma of the Uterus"), with demonstration by means of a specimen, was followed by a general discussion of them. After that the members presented and discussed different specimens from operations which they had done within the last few days.

Dr. Klein presented two specimens, both of which operations I had the pleasure of seeing, which made it doubly interesting to me. In fact, the whole meeting was similar to one of the same kind held in America. After the meeting the members adjourned to a neighboring café, where topics of a more general nature were discussed till a late hour.

In operating, Dr. Klein, who has a full beard, puts on first a cap which fits well over his forehead; in fact, the cap is more like a bag than a cap, it having a shirr string around the edge and so can be made any size desirable. After the cap is firmly adjusted he takes a piece of sterilized gauze folded lengthwise, and with that covers his beard and mouth, bringing the gauze well up under his nose, so that in reality all of his face that is exposed is his nose and eyes. The assistant wears the cap, but has no gauze over his face, maybe because he has no beard.

Whenever possible he does a vaginal hysterectomy in preference to the abdominal route, showing in this the French influence, for the Bavarians have a great tendency to copy the French. In doing a supra-pubic hysterectomy he invariably makes use of the Trendelenburg position and seems to have very good success with it. I saw him do a total extirpation of the uterus for myoma, one day, by what he called the "Howard Kelly" method. The patient was prepared after being placed on the table and then put in position. With a few quick strokes he cut down to the peritoneum, and when this was reached picked it up with two pairs of long dressing forceps, one pair being held by his assistant, and cut between them. The tumor was rolled out upon the abdomen and the intestines held back out of danger by means of an ordinary sterilized towel. Starting in on the left side he carefully passed a series of sutures through the broad ligament on that side, tying and cutting as he went. The same method was used on the right side and then the tumor was ready to be removed. After the removal of the tumor the peritoneum was nicely sewed over the stump and after carefully wiping out the abdominal cavity the wound was ready to be closed. This was done in three layers of sutures, the buried ones being of catgut. The first or deep layer was through the peritoneum and instead of using a needle a long curved instrument with an open eye in the end is used. Each edge of the peritoneum was picked up with a pair of long dress-

ing forceps, the needle passed through both sides, the catgut suture placed in the open eye, the needle withdrawn again, drawing the catgut with it and the suture tied. The second or middle layer of sutures extends through the deep fascia and also the muscles. They are introduced in much the same way as the deep layer. The third or superficial layer of silk-worm gut extends through the skin and superficial fascia. After the wound is closed it is washed off a little and then they are ready to apply the dressings. The legs of the patient are first thrown over an assistant's shoulders, the knees resting on the shoulders of the assistant and the shoulders of the patient resting on the edge of the table. This leaves the hips and lower part of the back free, so that a bandage can be applied very easily. The dressings are very simple, consisting merely of absorbent sterilized cotton, which is put over and around the wound in vast quantities. Around this is wrapped two or three wide gauze bandages and the dressing is completed. If all goes well, the dressings are not removed for ten or twelve days, when the cotton is taken off and fresh applied.

Gauze bits are used entirely and for every kind of operation. I have yet to see in Germany a gauze sponge, or anything else which has been dipped in water, used. They seem to have an aversion to it both as something to drink and as something to clean up the wound with.

The great antiseptic in use here is "Hydrargyri Onycyanati." It is used exclusively in preference to everything else. The great point in its favor is said to be that it does not rust instruments and is therefore the best antiseptic solution to place them in. It comes in tablet form, the tablets being a little larger than an ordinary sized antiseptic tablet, "Huested's," and one tablet making a 1 to 1,000 solution. A bottle of 100 tablets costs \$1.25, rather expensive. The solution formed is of a blue color, though whether this is due to the substance itself or to a special coloring matter, I have been unable to find out. It is very nice and mild for the hands and does not chap them or make them in the least sore. They claim that it is a stronger antiseptic than bichloride, though of this I have my doubts. If there is one thing, however, that the surgeons of Munich agree on, it is of the great usefulness of "Hydrargyri Onycyanati."

One thing that is to be noticed in Germany is the few cases

of appendicitis which they have, and the little which appears in their medical journals concerning the operation. They rarely, if ever, operate before perforation has taken place, and so they lose very nearly all of their cases. Consequently the majority of the abdominal surgeons condemn the operation in unmeasured terms. Germany is almost the last place in the world where a person wants to have an operation for appendicitis.

Already the medical journals are being filled with notices of the "International Congress of Gynecologists and Obstetricians," which is to be held in Amsterdam, Holland, from the 8th till the 12th of August. By that time the "International Disarmament Congress," which is to be held at "The Hague," will be over and the doctors will be able to come and go in peace. All the leading gynecologists of Germany have signified their intention of taking part in the meetings, and no doubt England and America will be well represented. The official languages will be English, French, German and Italian.

EDGAR A. VANDER VEER.

MUNICH LETTER.

MUNICH, BAVARIA, *March 27, 1899.*

A very wise regulation in Munich for the protection of public health provides for the removal of all corpses within twelve hours after death to the cemeteries. This applies to both the rich and the poor, and in a crowded city like this, where so many people live under one roof, such a provision is most praiseworthy. The remains are taken to buildings erected for this purpose in each of the cemeteries. The interment does not take place for several days and one can procure a private room in which to be with his dead. Many people, especially of the lower class, prefer, however, to place their relatives in a large room with broad windows through which the public may gaze. The bodies lie in caskets with the face and chest exposed and are surrounded by wreaths, flowers and burning candles. Human nature is the same everywhere, and the old women who with us take delight in attending funerals are over here exemplified by those who go each day to the Friedhof to see and to criticise the late arrivals and, perhaps, if observed, to shed a tear. Those who in America

reckon on the importance and character of a funeral by the number of carriages which follow the hearse could here find the same gratification in counting the flowers, wreaths and candles. This public exhibition fosters a spirit of rivalry which must be remunerative for the florists, because Mrs. B. naturally wishes to make more display over her departed spouse than she saw made for Mr. A. a few weeks before. This care of the dead presents several important advantages and excludes all possibility of the premature burial of the dead, and I hope in a later communication to dwell more in detail on the Munich system.

The German government does not recognize women physicians, and druggists are not allowed to fill any prescription signed by them. There are, nevertheless, quite a number of practicing in Germany, who are obliged to have a male colleague sign their prescriptions and be responsible for any operation they may wish to perform. Women who wish to study medicine fare very badly. None of the German universities will grant a diploma to a woman, and at very few of the universities can they attend the medical courses. At Halle, where they are rather liberal in this respect, the students have signed a petition requesting the authorities to exclude women from the medical courses and clinics. The outcome of the situation will most likely be the establishment of a medical school for women, because Germany is advancing and broadening very rapidly nowadays. Foreign physicians who have not passed the State examinations are not allowed to practice. This is the same as with us. In the case of foreign physicians who come for study and to receive instruction, operations can be performed in the presence and under the direction of some responsible German physician. They make no restrictions in the diagnosis of patients or in pathology, which are the subjects of greatest attraction to foreigners. An American physician should not come to Germany to learn how to treat his patients, and nothing is more true than the oft-quoted remark, that in America the patient is treated and in Germany the case. In Austria the laws are not so stringent, and for this reason, as well as for the wealth of clinical material, post-graduate work in Vienna is more valuable for Americans.

The other day a young woman came into the out-patient department of the Frauenklinik complaining of some menstrual disorder. External examination revealed an abdomen with well

marked striæ. The hymen was intact, but upon internal examination two fingers could be rather easily inserted. The cervix was lacerated and the cervical canal about one-third inch in width.

The case was of special interest because the patient was so positive in her denial of ever having been pregnant. This, with the condition of the hymen, gave rise to some differences of opinion among the assistants. Professor v. Winckel, after a thorough examination, gave a positive opinion that a previous pregnancy had existed and that the unusual elasticity of the hymen had prevented its rupture.

A description of one of Professor v. Winckel's recent laparotomies may be of interest. The operating room is on the top floor of the hospital and is well lighted by large windows and a skylight. This room is used only for abdominal sections and is plain and clean, containing several sterilizers, washstands, and a glass instrument stand. The patient was laid on the table so that the buttocks rested on the edge. The legs were separated and supported on two stands. The narcosis was under chloroform. An assistant scrubbed, shaved and prepared the patient while she was on the table. Dr. v. Winckel took his position between the legs of the patient as in vaginal work and sat on a stool while he operated. This was the first time I had ever seen an operator take such a position and it certainly appeared to be very convenient. The assistants were on each side of the abdomen and could render much assistance without interference. The operator has a full view of the patient and the instrument trays and can survey the whole situation. The patient had a large ovarian cyst on the left side. An incision was made in the median line from the umbilicus to the symphysis. The muscular layer was divided and a small opening made through the peritoneum, which was further enlarged by means of scissors as in a post-mortem. A trochar was plunged in the cyst, and when the cyst was small enough it was rolled out on the abdomen and the intestines held back by hot sterile towels. Catgut ligatures were tied through and around the broad ligament and the cyst removed. The peritoneum was stitched over the stump as in an intestinal section. The uterus and right ovary were not removed. The peritoneum was united with a continuous catgut suture. Then the muscular layer was brought

together by means of interrupted catgut sutures and finally silk-worm gut was used for the skin and adipose tissue. No drainage was employed. The operation lasted only twenty-four minutes and scarcely a drop of blood was lost. A leaf dropped out of the table under the lower part of the back and the dressings were easily applied. The recovery of this patient was good and uneventful.

Last week a rather unusual case was operated upon in the obstetrical division of the Frauenklinik. The patient was a young woman twenty-five years of age, greatly undersized, and measured only 4 feet 2 inches in height. Her osseous and muscular systems were well developed and presented no deformities. As would be expected, she had a generally contracted pelvis with the following dimensions: Circumference of pelvis, 28 inches; external conjugate, 7 inches; right transverse, 7 inches; left, $7\frac{1}{2}$ inches; diagonal conjugate, $4\frac{1}{4}$ inches; distance between tuber ischii, $2\frac{3}{4}$ inches; height of fundus, 14 inches; diameter of abdomen, $37\frac{1}{2}$ inches. She gave the history of three previous pregnancies, all of which had been terminated by perforation and extraction. The child was living, and the foetal movements could be plainly seen. The position was L. O. A. The labor pains were strong and after twelve hours the cervix was well dilated, but the head had not engaged. The life of the mother was then thought to be in danger, the pulse being over 100 and the temperature 101° F. The patient refused to have a Cæsarean section performed and consented to the perforation of the skull of the living child. The vagina was thoroughly irrigated with a 3% Lysol solution and the bladder emptied. Owing to the height of the head the operation was difficult and tedious. Two perforations were made and the vagina again irrigated. The cranioclast was then applied and after great trouble the head was extracted. The birth of the trunk was also difficult and the right clavicle was broken during the process. The child weighed nearly six pounds. The narcosis was under chloroform and lasted one and a half hours. There was no laceration of the cervix or perineum, and the puerperium has been uneventful. The uterus contracted well and at the time of writing, eight days after the operation, the patient is up and about the ward and at no time did the temperature rise over 99° F. and there has been no abdominal tenderness.

H. L. K. SHAW.

Editorial

The Albany Guild for the Care of the Sick Poor The annual report of the Guild for 1899, has recently been issued, and shows progress of the work undertaken, which must prove gratifying to contributors to its charitable purposes. A more extended field of operation has been opened, which enlists the co-operation of physicians by rendering a service most helpful to them. It has been demonstrated by the Guild that that part of the care of the patients which properly belongs to the nurse, and which the physician has neither the knack nor the time to give, can be provided outside of hospital wards and of the houses of those who are able to secure trained nurses, for the public at large. Under the supervision of skilled visiting nurses, the Guild has placed undergraduates in the homes of the poor, who are competent to carry out such instructions as the physician finds desirable to give. The administration of enemata, douches and hypodermatic injections, and the taking and recording of temperature and pulse, are thus obtained at stated regular intervals, and bathing and other care of the patient and of the room, proper diet, the management of delirious or helpless cases are carried on under the most approved system.

During the year ending February 1, 1899, 486 cases were in the care of the Guild. Of these, 362 were charity patients; 85 were able to pay part of the expense of the nurse provided, and 39 were infirmary cases, receiving home care. There were 5,564 visits, with special treatment, and 1,287 visits for professional supervision of convalescents, a total of 6,851 visits; \$1,983.73 were expended.

The ANNALS in previous years has directed attention to the details of the work. Its difficulties have not been exploited, but here and there in the "Specimen Pages from Weekly Records of the Nurses" are indicated the trials of the district nurse, and the unyielding response to this sacred duty. One case is reported as follows: "Gave mother douches and bath daily; bathed twins daily; husband, a drunken loafer, tried to forcibly

eject nurse from house; nurse loaned clothing, furnished mother with necessary nourishing food, soups, etc.; very pitiful case." The success of an enterprise conducted on the high moral plane of the Guild is assured. It is not necessary to plead for support, but rather to direct the attention of physicians to the great assistance they have at hand when ordinary resources yield to the overpowering influences of vice and poverty.

**The Albany
Medical College**

The sixty-eighth commencement and the twenty-sixth annual meeting of the Alumni Association of the Albany Medical College were held April nineteenth. The large number of the alumni present, the great interest evinced in the proceedings and the enthusiasm manifested, proved that the graduates of the Albany Medical College are glad to renew their student recollections and to thus testify to their loyal support and appreciation of the good work done by their alma mater. The luncheon at the Albany Club for the non-resident alumni, proved a most attractive innovation and allowed abundant opportunity for the interchange of reminiscences of student trials, tribulations and triumphs.

At the commencement, the largest class of recent years, sixty-seven in number, received their diplomas and listened to a scholarly address by the Rev. Dr. Terrett of Hamilton College. This eloquent divine developed the fact that the modern scientific laboratory methods had invaded every realm of thought and that the student dealt not with pictures and representations, but with the very thing itself.

The alumni dinner, which for several years had been discontinued, was, at the urgent request of many alumni, re-established and proved in every respect to be a most enjoyable gathering.

At both the alumni meeting and the dinner, references made by speakers to the need of a new college building in close proximity to the Bender Laboratory, were received with generous approval and the feeling prevailed that the alumni would be glad to testify to their loyalty in some such substantial manner.

State Medicine

Important Bills in New York Legislature.—Senate bill No. 443. An Act “For the protection of public health and to prevent mistakes in the handling of poisons.” Introduced by Mr. Wilcox.

A synopsis of this bill appeared in the March number of the ANNALS. It passed both houses and went to the Governor, but was withdrawn by Mr. Wilcox on account of a strong opposition to a clause in the bill which exempted all patent and proprietary medicines from the provisions of the act.

Senate bill No. 644. An Act “Authorizing the practice of medicine by certain persons.” Introduced by Mr. Ford.

This bill passed both Senate and Assembly and was amended in committee in the Assembly. The amended bill reads as follows: “It shall be lawful for all such persons as shall have held the rank of a commissioned officer in the capacity of a surgeon in any regiment or battalion organized or furnished by the State of New York, whether it was mustered into the service of the United States of America during the late war with Spain or not, and who shall have graduated from a medical college in the State of New York, and have received a diploma therefrom, shall not be required to pass a Regents’ examination, but may apply directly for examination by the State Board of Medical Examiners.”

Senate bill No. 943. An Act “To provide for the completion of the east wing, kitchen and dining rooms of the Danemora State Hospital for Insane Convicts.” Introduced by Mr. Chahoon.

The act appropriates \$13,000, or as much thereof as necessary, to complete the work indicated by the title.

Senate bill No. 1068. An Act “To allow cities of the first class to establish, equip and maintain, outside of their corporate limits and with the approval of the State Board of Health, hospitals for the regular treatment of the disease known as pulmonary tuberculosis.” Introduced by Mr. Johnson.

Text same as that of bill presented in the Assembly by Dr. Henry and which passed that body. A synopsis is given in the February number of the ANNALS. Dr. Henry's bill passed the Senate and is now in the hands of the Governor.

Senate bill No. 1358. An Act "To amend the Laws of 1893, relative to the public health." Introduced by Mr. Coggeshall.

The Regents are authorized to give the license to practice to any person convicted prior to the passage of the Laws of 1893, and who shall have earned the commutation for good behavior, as provided by law.

Senate bill No. 1386. An Act "To provide compensation to the owners of cattle destroyed pursuant to the Laws of 1894, and repealing certain acts relating thereto in the city of New York." Introduced by Mr. Ford.

This measure passed both houses of the Legislature in 1898, and was vetoed by the mayor of New York. It passed both houses this year and he again vetoed it; but it was afterwards brought up in the Senate and amended, we understand, to conform to his ideas.

The bill, as it stands amended, provides for the compensation to owners of cattle and other animals destroyed because of tuberculosis or other taint in the city of New York, during 1896, 1897 and 1898; fixes the rate of compensation with the provision that no animal shall be appraised at more than forty-five dollars; gives the board of health of New York power to audit and determine all claims arising from such destruction; authorizes the board of estimate to allow such claims, and directs the comptroller to raise the moneys for the payment thereof, by the issue of revenue bonds.

Senate bill No. 1391. An Act "To fix the hours of labor in hospitals and training schools for nurses." Introduced by Mr. Coggeshall.

Provides that it shall be a misdemeanor for any superintendent, manager or other officer or person having charge of a public or private hospital or training school for nurses, to exact from any person in training to be a professional nurse, more than

nine hours labor, the same to be performed within twelve consecutive hours, or more than sixty hours within any one week.

Assembly bill No. 1764. An Act "For the protection of public health, and to prohibit certain nuisances." Introduced by Mr. DeGraw.

This act prohibits the manufacture, within the corporate limits of any city, of any chemicals emitting obnoxious odors, and declares the manufacture of such chemicals a public nuisance.

Assembly bill No. 1770. An Act "To amend the Greater New York charter, relative to offensive trades." Introduced by Mr. Maher.

Prohibits bone boiling, bone grinding, horse skinning, cow skinning, or skinning of dead animals, the burning of offal or the shells of oysters, clams or other shell fish within the borough of Manhattan.

Assembly bill No. 1964. An Act "To regulate and control the sale of horse flesh as food." Introduced by Mr. Fallows.

Directs the commissioners of agriculture to authorize any person or persons to examine as to condition and to properly tag all horse flesh before it is sold as food.

Assembly bill No. 2013. An Act "For the protection and improvement of the purity of the waters of the State, and conferring additional powers on the State Board of Health." Introduced by Mr. Fordyce.

This act is to provide such general supervision, examinations, regulations and recommendations by the State Board of Health as shall be necessary to protect the waters of the State from further pollution and to secure the improvement of the purity of polluted waters. It designates the duties of the board and confers upon it the power to carry out the provisions of the act.

Assembly bill No. 2014. An Act "Making an appropriation for expenses incurred by the State Board of Health, in making investigations and experiments looking to the protection and improvement of the purity of the waters of the State." Introduced by Mr. Fordyce.

Appropriating \$10,000 for the purpose of making investigations to ascertain the best means of diminishing or stopping the pollution of the waters of the State, as authorized by the preceding bill. These two bills have been presented in the Senate by Mr. Johnson.

Assembly bill No. 2107. An Act "To amend the Laws of 1897, relative to the appointment of a president of the board of health of Greater New York." Introduced by Mr. Bulkley.

By this act the president of the board may be a physician. It has passed the Assembly.

Assembly bill No. 2215. An Act "To exempt from taxation the property of certain medical societies situated in cities of the first class." Introduced by Mr. Cotton.

The exemption of property for any society in the counties of Kings or New York shall not exceed \$100,000, and in any other county \$50,000.

[Cities of the first class have a population of 250,000 or over, therefore Greater New York and Buffalo are the only two cities of this class in the State.]

The following important measures have passed both houses of the Legislature:

Senate bill No. 1083. An Act "To amend the Code of Criminal Procedure, relating to coroners, and abolishing coroners' juries." Introduced by Mr. Brackett.

This bill abolishes the coroner's jury in all counties of the State, except those "in which is situated in whole, or in part, a city of the first class." Signed by Governor.

Assembly bill No. 1184. An Act "To amend the State charities law, relating to the licensing and regulation of dispensaries by the State Board of Charities." Introduced by Mr. Murphy.

This bill is a compromise measure, coming after three years of controversy before committees in the Legislature and in the outside medical world. In 1897, the original bill, called the Sullivan dispensary bill, passed both houses and was vetoed by the Governor. In 1898, it passed the Senate by a vote of forty to

two, but died in the Assembly committee on public health. This year there were two bills presented by opposing forces, but a conference was held and the old Sullivan bill amended to the apparent satisfaction of all concerned. A synopsis of the bill is given in the March number of the ANNALS. Signed by Governor.

Assembly bill No. 1269. An Act "To amend chapter 661 of the Laws of 1893, relating to the protection of potable water supplies." Introduced by Mr. Rodenbeck.

Increases the power of State Board of Health in the protection from contamination of the sources of the supplies of potable water.

Assembly bill No. 1635. An Act "For the regulation of pharmacists and druggists and to prevent accidents and mistakes in the compounding of medical prescriptions in the city of New York." Introduced by Mr. Maher.

In 1898 this measure, commonly known as the "short hour drug clerk bill," passed both houses and, if we remember rightly, was killed by the mayor of New York.

Dr. Henry has recently presented a bill in the Assembly, subsequently defeated, containing the provisions of the New York city act, and made it applicable to all the cities of the State.

The "Cattle Inspection Bill" Defeated.—For a number of years the State Board of Health has been making an effort to stop the importation of diseased cattle. Canada, Pennsylvania and nearly all the bordering New England States have laws providing for the inspection of all cattle entering their lines. New York State has no such protecting law, consequently, it has become a dumping ground for nearly all the cattle rejected by these territories, with the only result possible, it is full of infected cattle. Almost monthly herds are inspected by the State Board for tuberculosis, large percentages of infected cattle found and slaughtered.

In Pennsylvania, in 1898, 10,447 inspections were made at the expense of the commonwealth, and 12.9% condemned; 21,000 cattle were examined upon entrance to the State, and 146 condemned. This may seem a small number and not worth the expense of so thorough an inspection; but it is well known that

a few diseased head distributed through the State will infect a large number of herds within a short time.

It is this indiscriminate importation and distribution of diseased cattle that the people of all our surrounding States have protected themselves against. A similar protection was recently denied the people of our own State by their representatives in the Legislature. Early in the session of this year, a bill was presented in both houses giving this protection. A full synopsis of the measure was given in the February ANNALS; at that time a few suggestions were offered, which, in our judgment, would have improved the act, but it was a good measure and would have accomplished much toward righting the present shameful condition. A large hearing was held before the Senate committee, to which it was referred, and it was placed before the Senate April tenth. It started an animated debate which soon resolved itself into a controversy between humanitarian and business interests. The opposition claimed that if the bill became a law it would force a number of cattle dealers out of business (but just how, we are unable to understand); their arguments prevailed and the bill was referred back to its committee with instructions to strike out the enacting clause, which kills the bill for this year. So the health and lives of our people received no consideration, while the possible interests of a few cattle dealers received every consideration.

The New York city board of health has recently sent out the following sanitary ordinance:

To all persons, corporations, or companies, bringing milch cows into the city of New York:

Your attention is respectfully called to the provisions of Sanitary Ordinance No. 135, as amended February 15, 1899, as follows:

Section 135. That no diseased or sickly cattle, swine or sheep, nor any horse, dog or cat, which is suffering from, or has been exposed to, any disease which is contagious among such animals shall be brought into the city of New York. All persons, corporations, or companies bringing milch cows into the city of New York shall furnish a certificate signed by a veterinarian who is a graduate of a recognized veterinary college, with the date of graduation and the name of college from which the degree was received, to the effect that said cows are free from tubercu-

losis, as far as may be determined by physical examination and the tuberculin test. Said certificate shall give a number which has been permanently attached to each cow, and a description sufficiently accurate for identification, stating the date (which must be not more than sixty days prior to the time they are brought into the city), the place of examination, the temperature of the cow or cows at intervals of three hours for twelve hours before the subcutaneous injection of the tuberculin, the preparation of tuberculin used, the location of the injection, the quantity injected, the temperature at the tenth hour after the injection of the tuberculin and every three hours after the aforesaid tenth hour for twelve hours, or until the reaction is completed. No cow with a certificate which states that said cow gave a reaction of two degrees F. after the injection with 0.5 c. c. of the tuberculin prepared by the Department of Health of the City of New York (or its equivalent), diluted with ten times its volume of a 0.5 per cent watery solution of carbolic acid, shall be brought into the city of New York.

This section with amendment to take effect June 1, 1899.

By order of the Board of Health.

The health boards of other cities can and probably will act in a similar manner, but this will not protect the herds of the country districts from infection, or keep from entering the State, infected cattle for the purpose of immediate slaughter.

In Memoriam

ROBERT LOUGHRAN, M. D.

Dr. Robert Loughran died at his home in Kingston, N. Y., on Tuesday, April 11, 1899, aged 64 years. Paralysis of the heart was the cause of death.

The deceased was the oldest son of William Loughran, a Scotchman, who early in life came from the north of Ireland and settled in Delaware county, later removing to Hensonville, Greene county. Robert was born in Hancock, Delaware county. He studied medicine in the office of Drs. Aaron Burr and William C. DeWitt, at Saugerties, graduated from the Albany Medical College in 1857 and developed rare skill as an operative sur-

geon, which was increased by the opportunities for practice afforded by his six years of service in the War of the Rebellion. For his services to his country, Dr. Loughran received the brevet rank of colonel. At the close of the war he settled in Kingston. In politics, Dr. Loughran was a Republican, ever active, aggressive and outspoken, a fighter for the principles that he considered right. In 1860, while still residing in Saugerties, he was elected to represent the first district in the Assembly. Again, in 1875, he served in the Assembly. He represented the first department of Kingston in the board of supervisors in 1875, 1876, 1877, 1878, 1879, 1887 and 1889. In 1876 and 1879 he was chairman of the board. He has also represented the first ward in the common council, where his devotion to the interests of his constituents, regardless of party dictation, sometimes brought down upon him the wrath of those who assumed to control the Republican party. Dr. Loughran had also served as a pension examiner, a member of the board of health and as health officer. He was married in 1866 to Mary, daughter of E. W. Budington. She died within a year, leaving no children. In 1872 Dr. Loughran married Helen Kiersted, daughter of Christopher L. Kiersted, and widow of Bernard Schoonmaker, who survives him, together with five children, Robert L., a physician; Christopher K., a lawyer; Helen, Harold Scott and Francis. Two other children died in infancy.

In professional and political life Dr. Loughran will be sadly missed. Positive in his convictions, of a combative temperament, there was yet underlying a gruff exterior a broadness and a deep human sympathy that those who knew him only casually little suspected. True to his friends, ever willing to stand up in their cause, he will be missed by hundreds who will look in vain for one to fill the place he occupied.

A TRIBUTE TO THE LATE WM. H. HODGMAN, M. D.*

By JOHN F. HUMPHREY, M. D.

MR. PRESIDENT AND GENTLEMEN.—I beg leave to acknowledge the honor conferred by this society in the appointment for the writing of this memorial. While it would seem proper for

* Read before Medical Society at Saratoga Springs, N. Y., November, 1898.

one of his immediate contemporaries to perform this duty, there is, perhaps, a certain fitness in the tribute coming from one of his younger colleagues, to whom he has been both teacher and friend. We are assembled in this society hall to-night to pay our last tribute to the life and work of our late professional brother, William Henry Hodgman.

“ There is no calm like that when storm is done;
There is no pleasure keen as pain’s release;
There is no joy that lies so deep as peace,
No peace so deep as that by struggle won.”

— HELEN GRAY CONE.

In his death we mourn the loss of one who will ever be cherished as an enthusiastic member of this society, an able scholar, a skilled diagnostician and surgeon, whose name we revere for the many characteristics that made him the popular colleague, physician and citizen. The loss of our friend we shall appreciate more and more as the days succeed one another and continue to bring us face to face with those surgical and medical problems and complications we were accustomed to refer to his master mind for solution. With what willingness and interest he came to our aid, analyzing in detail every salient feature of the case, dispelling the shadows and allowing the light to come in upon our clouded minds!

To me, as one who was closely connected with him for eleven years, four years as student and seven as an associate practitioner, walking with him day by day, absorbing from his great fund of knowledge, studying his humane inclinations and feeling his manifold influence blend itself into my work, Dr. Hodgman’s death comes as an irreparable personal loss. It is not only an able and esteemed colleague who has gone, but a friend ever constant and true. Soon after the closing of the series of meetings of this society for the year ’97 and ’98, and as we were about to enter upon our work of a busy summer, we were sorely grieved to hear of the death of one of our noblest and best, the first in the history of our society to be summoned to his eternal rest.

Taken in mid-life from the midst of an activity which knew no restraint, prepared by the experience of a quarter of a century for unbounded usefulness, with a popularity justly earned and

modestly borne, his eyes closed to a future whose horizon on all sides was radiant with success. He was disarmed of health during most of his career, fighting for his extensive practice, with its unbounded experience and augmenting honors and popularity, despite the insidious disease which constantly reminded him of his serious condition, but which he bore with patience and true fortitude, healing the ills of others, his own he could not heal. To his patients he was the kind, sympathetic and skilful attendant, ever alert to the needs and watchful of the fluctuations of disease in those who were under his care.

I might rehearse with enthusiasm Dr. Hodgman's great surgical skill, his contributions to medical literature, his great popularity as a colleague and the impress he left upon physician and layman alike, but here amongst those who knew him best we remember him rather as the kindly associate, the fine type of physician and gentleman, the genial and unassuming colleague whom it was a pleasure to meet and with whom it was a greater pleasure to have been associated. Although by compulsion rather than choice he was unable to attend many of the meetings of this society during the year, having to pass his winters in a more genial climate, we shall feel his absence nevertheless, for with his presence always seemed to come some special practical message, either in the presentation of papers allotted to him or in the discussion of subjects before the society. He never hesitated to point out and discuss his mistakes for the benefit of his younger associates.

Who that has heard him can ever forget his courteous and conscientious manner in the discussion of medical subjects, always endeavoring to impart whatever knowledge he might have with a free and ready willingness. His was the true professional feeling that whatever of knowledge he possessed was through our craft for all humanity.

The professional career of Dr. Hodgman was inaugurated in the year 1869 upon his entrance into the offices of Drs. C. S. Grant and T. B. Reynolds, where application and fidelity characterized his work. Under the tutelage of these faithful physicians he exhibited an unusual aptness for the profession he had chosen. In the fall of 1870 he entered upon his duties in the College of Physicians and Surgeons, now the Medical Department of Columbia University, where, under a two years' course, then in

vogue, he was graduated with honors in the class of '72. He took a third year in clinical training as an interne in Charity Hospital, where he received a fit preparation for the work upon which he was about to enter. Dr. Hodgman's early career was handicapped by ill-health, as was the latter part of the same, and not until he spent a few months abroad, about 1880, did he feel equal to the exigencies of an active practice. He was not known as a surgeon of more than ordinary ability until 1887, when he became a pioneer in aseptic and antiseptic surgery, to which he was converted as a most enthusiastic disciple even to the most minute detail of every operation.

The last decade of his life became the capping-stone of his career, and during that time the name of Hodgman became almost a household word to physicians and laymen alike through this whole northern section of the State, where he was called as a skilled consultant and surgeon to conquer the ills and repair the surgical conditions befalling many an unfortunate individual. As a consultant he was known to every physician in this section, impressing all with whom he came in contact by his kind, unassuming manner and his resources of accurate information of both medical and surgical diseases.

During the life of Dr. Hodgman it was always a great pleasure to him to help in fostering public institutions, and in the last three years he felt the utmost satisfaction in assisting in the establishment and maintenance of the Saratoga Hospital, to which he contributed generously his time, money, counsel and skill. At all times was he enthusiastic concerning the success of this institution, and it is without doubt that by his skill and reputation as a surgeon the hospital attained its first standing for thorough and careful work and was placed upon a basis which will ever be a source of great pride to the citizens of Saratoga.

In November, 1887, he was married to Miss Gertrude V. Varney, who with a daughter of eight years survives him.

During the rush of a busy practice Dr. Hodgman was not so unmindful of his duties as a citizen that he could not contribute a portion of his time to the bettering of those about him, and it was with this spirit that he received his appointment as water commissioner, serving during a period of eight years. His knowledge of hygiene and mechanics made him an especially

valuable member of this important board. It was during his service that the present Holly pumps were installed, thus inaugurating a new era in our admirable water system.

As health officer of Saratoga Springs he acted continuously over a period of nine years. Observing with interest at the time of his installation in office the pressing need of a more thorough system of quarantine and fumigation and of our sewer system extending to the suburbs of the village as a preventive of infectious diseases, he earnestly labored for the adoption of these measures, and with success, too, for he saw them in active operation as he had advised and encouraged during his official career.

As we turn from this hall to-night we will keep in the recesses of our hearts the peculiar impress he left upon each one of us, and in after years it will be said of him, as was said of the Napoleon the First:

“Something great and good must have been in this man, something loving and kindly that has kept his name so cherished in the popular memory and gained him such lasting reverence and affection.”

Sad, indeed, is the man who is only remembered by the books he has written, operations performed, wealth amassed during a long and successful professional career, but thrice happy is he who, like our late brother, leaves not only these evidences of a well-spent life, but a precious memory cherished in the hearts of those made better and happier by his living.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY COUNTY MEDICAL SOCIETY.—A regular meeting of the Medical Society of the County of Albany was held Wednesday evening, March twenty-second. In the absence of the President, Vice-President Ullman occupied the chair. The reading of the minutes was dispensed with. The first paper of the evening was read by Dr. Vander Veer, on “Tuberculosis of the Female Organs of Generation.” Dr. W. G. Macdonald followed with a paper on “Tuberculosis of the Urinary Tract,” and exhibited the modern and most improved instruments for properly conducting an examination and for the successful treatment of the diseases considered in his paper. The last paper was read by Dr. J. D. Craig on “Tuberculosis of the Male Genitalia.” The papers were not considered individually, but a general discussion followed.

A regular meeting was also held Wednesday evening, April fifth, at Alumni Hall. The subjects considered were, "The Clinical Aspects of Chronic Pulmonary Tuberculosis," by Dr. S. B. Ward, and "Tuberculosis of the Pharynx," by Dr. C. F. Theisen. Dr. Ward's paper was discussed by Drs. Van Vranken, MacFarlane, and Dr. Theisen's by Dr. Blair and others. Dr. Van Vranken acted as President *pro tem.*, in the absence of both the President and Vice-President.

ALBANY MEDICAL COLLEGE TRUSTEES.—At the annual meeting of the Board of Trustees of the Albany Medical College, April seventeenth, Mr. John G. Myers, of Albany, was elected a trustee in the place of Joseph W. Russell, deceased, and John H. Jackson, of Menands, and Charles J. Van Benthuyzen, of Albany, were also elected trustees to fill vacancies in the board.

DEATH OF PROFESSOR RUTHERFORD, M. D., F. R. S.—The University of Edinburgh has lost, by the death of Dr. Rutherford, Professor of Physiology, a most eminent teacher and the medical world a distinguished ornament.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The twenty-fifth annual meeting will be held in Chicago, September twelfth to fifteenth, under the presidency of Dr. Duncan Ere, of Nashville. Particulars will be announced at a later date.

DR. DEAVER RESIGNS.—The resignation of Dr. John B. Deaver, as Assistant Professor of Applied Anatomy in the Medical Department of the University of Pennsylvania, has been tendered and accepted, to take effect at the end of the present academic year.

MARGARET FAHNESTOCK TRAINING SCHOOL FOR NURSES.—The training school for nurses, at present connected with the New York Post-Graduate Hospital, is to have a new building, at a cost of \$100,000. It will occupy three lots opposite the Hospital, and is founded by Mr. Harris C. Fahnestock, in memory of his wife.

THE CANCER BACILLUS.—The *New York Herald* announced recently that the statement of Dr. Bra, "that he has succeeded in isolating the parasite which is invariably present in cancerous growths," had been confirmed by cable. It is a fungoid of the ascomyceter family, and is believed to be the active agent in the production of cancer. Inoculation of animals with a culture produced cancerous tumors, from which the parasite could be again isolated.

PROFESSOR KOCH'S SOUTH AFRICAN EXPEDITION.—The respect and esteem for Dr. Koch in Germany is shown by the promptness in which the Imperial Parliament has made a grant of 60,000 marks, about \$15,000, to defray the expenses of his expedition for the scientific investigation of malaria in South Africa.

RESIGNATION OF DR. SKENE.—Recently Dr. A. J. C. Skene, of Brooklyn, has resigned the presidency of the Long Island College Hospital,

with which he has been officially connected for thirty years, and has accepted the presidency of a proposed institution, to be called the Hospital for Breadwinners, which will be built for the accommodation of self-supporting women, who shall need treatment.

JOHNS HOPKINS UNIVERSITY.—Dr. Simon Flexner, Professor of Pathological Anatomy, and Resident Pathologist of the Johns Hopkins Hospital, accompanied by two medical students, has sailed from Vancouver for the Philippines. Their object is to make a clinical and pathological study of diseases prevalent in the tropics, and they have taken with them the best modern instruments and appliances for the proposed investigation.

NORTHWESTERN UNIVERSITY WOMAN'S MEDICAL SCHOOL.—Dr. Marie J. Mergler has been elected Dean of Northwestern University Woman's Medical School in place of Dr. I. N. Danforth, resigned. Dr. Danforth has been elected Dean Emeritus.

The yearly course at this school has been changed from one of two semesters to one of four semesters of twelve weeks each, commencing the first of July, October, January and April. Three semesters will be required; the other semester will be optional. The number of regular students will be limited to 100, twenty-five in each class. They will be admitted to competitive examinations for place in class, only after having complied with the requirements of the State Board of Health.

CORNELL UNIVERSITY MEDICAL COLLEGE.—The plans for the new medical college, which will be presented to Cornell University by Colonel Oliver H. Paine, are now complete. The building will cover the entire west side of First avenue, from Twenty-seventh to Twenty-eighth streets, and will be five stories high. It will contain three of the largest amphitheatres in New York, two of which will be full two stories in height. The dissecting room, 50 feet wide by 170 feet long, will be lighted by the largest skylight in the city. Every possible favorable feature will be used to make the building the finest of its kind. It is expected that the building will be ready for occupancy at the beginning of the fall semester in 1900.

During the coming summer the University will begin its summer medical courses in New York, which will last from May fifteenth to August first. They will consist largely of laboratory and clinical work, and will be open to both undergraduates and graduates.

O'DWYER MEMORIAL.—A committee of over forty physicians, representing sixteen different medical societies of the city of New York, and including representatives of both schools of medicine, has been formed for the purpose of doing honor to the memory of Dr. Joseph O'Dwyer.

The first meeting was held at the New York Academy of Medicine, November 22, 1898, under the chairmanship of Dr. J. D. Bryant, and was mainly devoted to organization. Dr. George F. Shrady was elected per-

manent chairman, and Dr. Alfred Meyer, permanent secretary, and the following committee on scope and plan was appointed: Dr. Dillon Brown, chairman, and Drs. Robert Abbe, R. G. Freeman, L. Emmet Holt and Louis Fischer. At the second meeting, held at the Academy of Medicine, March 13, 1899, the report of the committee on scope and plan was adopted and now only awaits final action of a meeting of the full committee.

The memorial to Dr. O'Dwyer will probably take an educational form, for by the plan now outlined it is proposed to raise a fund of \$30,000, the interest of which shall support two O'Dwyer Fellowships in Pædiatrics, open to competition by physicians who graduate in the United States and to be held by the successful competitors for a period of two years. During this period they must furnish satisfactory proof of their engagement in original research work to a committee of five, one of whom shall be appointed by the President of Harvard University, one by the Dean of the Johns Hopkins' Medical School, one by the Provost of the University of Pennsylvania, one by the President of the University of Chicago, and one by the President of the New York Academy of Medicine.

Many details of this general plan are still to be arranged, which it shall be the agreeable duty of the secretary to furnish to the medical press of the country so soon as they are finally decided. This preliminary notice has for its object merely to acquaint the profession with the fact that a movement of this nature is on foot, and that an effort will be made to give it the international character so fitting as a memorial to an investigator of international reputation.

THE AMERICAN MEDICAL ASSOCIATION.—The next meeting of this association at Columbus, June sixth to ninth, promises to be a most interesting one. At the Denver meeting two subjects, *Specialism in Medicine* and *Advertising and the Medical Profession*, were suggested and the third topic for consideration will be *The Medical Service of the Army and Navy*. The Grand Opera House, which has a seating capacity for 1,700 people, has been secured for the general meetings. The different sections will hold their meetings in separate halls.

The preliminary program includes the following: *Specialism in Medicine*: 1. "The Ethics of Specialism," by Dr. A. L. Benedict, Buffalo; 2. "How Far Has Specialism Benefited the Ordinary Practice of Medicine?" by Dr. L. Duncan Bulkley, of New York; 3. "The Relation of Specialism to General Medicine," by Dr. Solomon Solis-Cohen, of Philadelphia; 4. "The Specialties and Commercialism," by Dr. H. Bert Ellis, of Los Angeles; 5. Subject to be announced, by Dr. G. Hudson Makuen, of Philadelphia; 6. "Specialists and Therapy," by Dr. Elmer Lee, of New York; 7. "Specialism in Its Relation to Other Branches of Medicine," by Dr. G. W. McCaskey, of Fort Wayne, Ind. *Advertising and the Medical Profession*: 1. "Medical Advertising," by Dr. Robert H. Babcock, of Chicago; 2. "The Ethics of Advertising Applied to the Medical Profession," by Dr. A. Ravogli, of Cincinnati; 3. Subject to be announced,

by Dr. J. A. Lichty, of Clifton Springs, N. Y. *The Medical Service of the Army and Navy*: 1. "Aspects of the Late War From a Naval Surgeon's Standpoint," by Dr. W. C. Braisted, U. S. N.; 2. Subject to be announced, by G. G. Groff, now in Puerto Rico; 3. "What Should be Aimed at in a Reorganization of the National Guard System, so far as its Medical Department is Concerned?" by Dr. C. B. Nancrede, late of the U. S. V., of Ann Arbor, Mich.; 4. "The Relation of the Medical Profession to the Army and Navy as Developed in the Spanish-American War," by Dr. James A. Pilcher, U. S. A. There will be other important papers on miscellaneous subjects.

The Central Passenger Association has authorized a rate of one fare for the round trip. Other traffic associations will probably take the same action.

MARRIED.—Posson-Darcy, at Albany, N. Y., April 6, 1899. Dr. Frank L. Posson (A. M. C., '98), of Schoharie, and Miss Mary F. Darcy, of Albany. Dr. and Mrs. Posson are now enjoying an extensive southern trip.

Davis-Carter, at the Church of Zion and St. Timothy, New York city, April 6, 1899. Major Charles E. Davis, M. D. (A. M. C., '91), of Albany, N. Y., and Mrs. Charles Carter, of Honolulu. Dr. and Mrs. Davis will reside in Albany after a tour through the south.

Reid-Stanton, at Coeymans Hollow, N. Y., April 4, 1899. Dr. Martin S. Reid and Miss Emma Stanton. Dr. and Mrs. Reid will reside at Indian Fields, N. Y.

INTERNATIONAL CONGRESS FOR GYNECOLOGY AND OBSTETRICS.—The third International Congress for Gynecology and Obstetrics will take place at Amsterdam from the 8th to the 12th of August, 1899, under the patronage of the Minister of the Interior.

The leading questions for discussion will be the following:

- 1st. The surgical treatment of fibro-myoma.
- 2d. The relative value of antiseptics and improved technic for the actual results in Gynaecological Surgery.
- 3d. The influence of posture on the form and dimensions of the pelvis.
- 4th. The indication for Cæsarian section compared to that for symphyseotomy, craniotomy and premature induction of labor.

M. M. Doyen, Howard Kelly and Schauta will treat the first question; M. M. Bumm, Richelot and Lawson Tait the second; M. M. Bonnaire, Pinzani and Walcher the third, and M. M. Leopold, Pinard, Pestalozza and Fancourt Barnes the fourth.

The official languages are: English, French, German and Italian.

STATE OF NEW YORK — CIVIL SERVICE EXAMINATIONS.—An open competitive examination for the position of medical interne (homeopathic and regular) in the State hospitals will be held in various cities throughout the State on May 27, 1899. Salary of the position, \$600 per annum and maintenance.

Also an examination for assistant in dietary experiments, Lunacy Commission. Salary, \$100 per month.

Intending competitors must file applications in the office of the commission on or before May twenty-second. For application blank and detailed circular address the Secretary, New York Civil Service Commission, Albany, N. Y.

Book Reviews

Text-Book of Medical and Pharmaceutical Chemistry. By ELIAS H. BARTLEY, B. S., M. D., Ph. G. Fifth edition. Revised and enlarged, with 96 illustrations and 738 pages. P. Blakiston's Sons & Co., Philadelphia, 1898.

Also, *Manual of Clinical Chemistry.* Same author and publishers, 1899, with 33 illustrations and 150 pages.

Dr. Bartley's chemistry, which now appears in response to an increasing demand, in a fifth edition, has been before the profession, and in the hands of medical and pharmaceutical students for nearly fifteen years. The author is both a practical chemist and practicing physician; a teacher of chemistry and an expert in pharmacy, toxicology and physiological and sanitary chemistry, and that he is conversant with the needs of students in these departments is abundantly proved by the excellence of the books he has written. In reviewing the first named of these, the author of a criticism which appeared in a leading medical journal, published in New York city and issued by a house which publishes similar and competing works, said in its issue of January seventh:

"Under the guise of a 'Medical Chemistry,' it is a delusion and a snare. We hope that the day has gone by when high-school knowledge or what the student should get at his first year's undergraduate work at college, shall be presented to him in the guise of something new. What is wanted in works of this kind is up-to-date knowledge of pathological chemistry. * * * This work is certainly commendable for unprepared students, but it is our belief that every student applying for entrance into a medical school should know three-quarters of what is contained in Bartley's Physics and Chemistry."

We submit that a reviewer who knows so little about the actual attainments and the real needs of medical students is incompetent to pass judgment upon books of this class. The writer of this notice has been engaged in teaching chemistry to medical and pharmaceutical students for many years. Many of his students have been graduates of colleges or scientific schools, and they have not known "three-quarters," nor *one-quarter* of what is contained in such a text-book as this of Dr. Bartley's. Nor, in his opinion, do a tenth part of the recent graduates of our medical schools, to say nothing of the older graduates, nor do the members of our examining boards "know three-quarters of what is contained in Bartley's Physics and Chemistry." Much to be desired, as it may be,

that students beginning the study of medicine should have a thorough knowledge of physics and of general chemistry, inorganic and organic, and of the elements of physiological and medical chemistry, as a matter of fact, with the exception, possibly, of those entering one or two institutions which are engaged in training teachers rather than practitioners, not one in ten *does* possess such knowledge, and hence such a criticism, based on a condition which does not exist, is indiscriminating and unjust. That such a book is unavailable for a student's use, because its contents are not "new," is a strange criticism, indeed. If what is not "new" in Gray's anatomy were excluded, how useful would the remainder prove to the student? Has it come to the pass that in our rage for novelties our very text-books are to be spurned because their subject-matter is not *new*!

Dr. Bartley's text-book opens with about one hundred pages devoted to a clearly-written and concise statement of some essential facts in physics, which are intimately related to chemistry. Some of the properties of matter and its three states: Heat, light and electricity; solution, diffusion and crystallography are briefly treated, and then the nature of atoms and molecules, as the chemist understands them, are discussed and the principles of chemical notation, nomenclature, reaction writing and stoichiometry are stated. The non-metallic elements are next described and their official compounds fully stated, and then the metals are similarly treated, the physiological and toxicological bearings of each element being adequately presented. We regret that the author has not seen fit to adopt the spellings of chemical terms recommended by the Chemical Section of the American Association for the Advancement of Science, since these are coming into use rapidly and are, from almost every point of view, to be regarded as improvements. Organic chemistry occupies about one-third of the volume and the classification adopted is very satisfactory when the intent of the book is taken into consideration. Most of our new synthetic remedies are described, and, in many cases, tests are given for their identification and discrimination. Structural formulæ are used freely and in a manner that will be helpful, rather than confusing to one who has little previous knowledge of this vast field, and much wise discrimination has been shown in selecting for presentation such parts as are most essential in their value to the medical or pharmaceutical student, or the physician, and excluding that which is of little relative importance to such and which they can never hope to master and will probably never need to employ. The latter part of the book is devoted to physiological and clinical chemistry, treating of the proximate principles, enzymes, organized ferments, foods and nutrition, the processes of digestion, the milk and urine. Various useful tables, a glossary and an admirable index complete the volume, which is well printed and neatly bound. A very commendatory review of this excellent text-book may be found in the March number of the *Journal of the American Chemical Society*, indicating the favor with which it has been received by chemists, if not by the reviewer of the medical journal, of whose criticism mention has been made above.

The "Manual of Clinical Chemistry" is made up of the latter part of Bartley's "Text-Book," dealing with the milk and urine, to which the author has added a chapter of notes on urinary diagnosis; a collection of experiments with carbohydrates, fats, proteids, etc., and a scheme for the qualitative analysis of commercial prepared foods. It will be found a very valuable addition to the working library of the physician and a serviceable hand-book for students' use.

WILLIS G. TUCKER.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

Infection from the Hands in Pulmonary Phthisis.—Dr. E. R. BALDWIN, of Saranac Lake, N. Y., writes in the *Philadelphia Medical Journal* for the 3d of December, 1898, concerning infection from the hands in pulmonary phthisis. He says that little has been written of the hands as carriers of germs in the disease in question. He ascribes this in part to the fact that the importance of inhalation has been so especially emphasized. He made experiments on twenty-eight patients, ten private and eighteen sanitarium patients, all of whom were known to have expectoration containing bacilli. The experiments were not made so much with the expectation of determining the degree of danger from the hands as to note the difference as to the presence of bacilli in otherwise cleanly persons using handkerchiefs, and those depositing their sputum on cloths or in cuspidors.

In no case was intimation given, before making an experiment, of what its purpose was; hence the avoidance of risk of vitiation of the experiment by an unusually careful toilet of the patient. The patients had washed their hands, before the test washing, within periods varying from ten minutes to twelve hours.

The technic used was as follows:

Carefully cleaned, sterilized, plain glass finger-bowls with glass covers were used to catch from five to ten cu. cm. sterilized 0.1 per cent. $\text{Na}_1 \text{CO}_2$ solution, which was poured between the palmar surfaces of the fingers, while the patient rubbed them together in the bowl. The alkali was used to render the solution slightly soapy. Separate bowls were used for each patient.

Two small guinea-pigs were then used for inoculation with the washings of each private and five of the sanitarium patients. The others were simply examined microscopically for tubercle bacilli. One pig in each experiment was inoculated with 0.5 cu. cm. in the peritoneum, together with an equal quantity subcutaneously in the right groin. The Koch syringe used for all inoculations was boiled in alkaline solution before

use. The remaining wash water was centrifugated in clean, well-burned glass tubes and the sediment examined for tubercle bacilli.

Of the pigs used in the experiment with the private patients, in eighty per cent. one or both pigs became tuberculous, although in some the disease was extremely chronic, indicating that few bacilli or those of weak virulence had been inoculated. After inoculation with the washings from two of five sanitarium patients, one pig in each was found to have tuberculosis of very chronic type. Lesions starting from the point of inoculation were demonstrated in all the positive cases. The tuberculin test was applied in a few doubtful ones. No relation between the severity of the disease in the patient and that in the animal could be made out, and Dr. Baldwin is inclined to think that it was merely a question of the number of inoculated bacilli.

In two sets of animals only one became tuberculous, the other being found healthy when killed. Cornet ascribes a similar result, in seven of his experiments, to the small number of bacilli in the inoculated dust. In Baldwin's experiments only one pig of the thirty died of apparent septic infection, probably because of the small amount of inoculated material.

It is significant to note that the two negative results among private patients concerned ladies who were scrupulously careful, by the use of cloths and cuspidors and frequent washing, to keep their hands from being soiled. On the other hand, the two who used handkerchiefs only were found to furnish infection rapidly. The author advises avoidance of washable handkerchiefs. He concludes that if virulent bacilli can be demonstrated on the fingers, in so large a proportion of patients of average cleanliness, the chance of food infection in the homes of the unclean must be great. He concludes, also, that living tubercle bacilli are not infrequently present on the hands of patients who are not careful in the use of handkerchiefs, cloths or even cuspidors, when the expectoration is abundant. No precaution against contamination of the hands can avail better than the use of cuspidors, combined with frequent ablutions with soap and water. With the present usage of society, people are not likely to use pocket cuspidors, except in institutions. Consequently, handkerchiefs will be used in public, especially as anti-spitting laws are forcing individuals to use them. There is, therefore, urgent necessity for a cheap, comparatively impervious and soft handkerchief that can be burned.

A Case of Progressive Myositis Ossificans.—MONAN, in the *Münchener Medicinische Wochenschrift*, reports a case of this disease in a boy of four and one-quarter years of age. The family history was negative. From birth his big toes were too small. At one and one-half he had an attack of pneumonia lasting several weeks. Later he had a light attack of measles. At two and one-quarter he fell down stairs twice, but apparently did not hurt himself. Shortly afterwards he fell from someone's arms and struck his neck on a stone. Soon after his neck and then his head began to swell. Examined at that time, there was a ball-like mass under the skin of the neck, which his physician took for extravasated

blood. It was painless always. The swelling spread during three or four weeks from the neck to the back, over the shoulder, down the chest and finally to the face. This swelling disappeared finally, but where it had occurred there were here and there cords or hard lumps. General condition was good, sleep a little disturbed and some thirst and also some diarrhœa. In seven or eight months the hard lumps felt like bone, and long before this the child was much bothered by stiffness and by cramps in the muscles of the back, neck and both arms, which rendered these parts almost helpless. The movement of the right shoulder especially was hindered by a bony mass in the pectoral muscle. This prominence was removed and was found at removal to be in the form of bony masses in the pectoralis major near its insertion into the humerus. At present he is in good health, but has areas of bone formation in the R. side of the occipito frontalis, in some of the neck muscles, in both pectorals and deltoids, and in the muscles of the back and lumbar regions, in both biceps and also probably others, which cannot be yet made out clinically. The bony masses are spindle-shaped or flattened. In the neighborhood of some of them hard areas of connective tissue can be felt. The muscles were some of them atrophied, but react normally. The urine contained one-tenth the normal amount of lime. The author briefly discusses the pathology, and decides that it is not yet settled as to whether the process results from an inflammatory condition or is a new growth. He calls attention to the condition of mikrodacytylie which has existed in sixty-four per cent. of all described cases.

The Present Position of the Serum Therapy of Tetanus.—(F. KOHLER, in *Münchener med. Wochenschr.*, Nos. 45 and 46, 1898.) The author has collected ninety-six cases of tetanus treated with the serum and gives a resumé of the results obtained. Of the ninety-six cases treated in this way, 65 6-10 per cent. got well, 34 4-10 per cent. died. The usual mortality in cases of tetanus, without treatment, is 95 6-10 per cent. The author sums up his conclusions as follows: Statistics prove that there is a larger percentage of recoveries in cases of tetanus treated with the serum than before the serum treatment was used. The action of the tetanus serum in separate cases is unquestionably favorable, usually has some effect, but as a rule, the effect is very gradual. The serum should be used early in the attack in large doses, and repeated injections should be given. The cases of tetanus puerperalis, which were always regarded as very unfavorable, appear to be favorably influenced by the serum treatment. The result of the serum treatment depends upon the period of incubation. The longer this period the more unfavorable is the treatment.

Chronic Jaundice with Enlargement of the Spleen.—J. LEVY (*Thèse de Paris*, 1898) directs attention to a variety of chronic jaundice whose clinical features are (1) chronic icterus of uncertain duration, appearing paroxysmally, with moderate enlargement of the liver during the attacks; (2) considerable permanent hypertrophy of the spleen, which, during the

paroxysm, is congested and becomes progressively sclerosed; (3) digestive disturbances; (4) marked anæmia, and (5) no ascites or collateral venous circulation. The etiology is apparently an ascending infection of gastrointestinal origin, which involves the larger biliary ducts. The prognosis is favorable, since the disease may last for twenty years. Hayem has proposed the name *Ictère infectieux chronique splénomégalique à poussées paroxystiques*.

The Treatment of Pneumonia.—SIMON BARUCH, in the *New York Med. Journal*, Jan. 7, 1899, considers the treatment of pneumonia by applications of cold water to the skin. He quotes from his article read before the New York Academy of Medicine in 1897, in which the following statement was made: "That in acute infectious diseases, disturbances of the circulation are encountered, which manifest themselves clinically as reduced tension and diminished filling of the arteries, and which are commonly described as heart failure. The condition of the peripheral vessels bears a very large share in the production of cardiac inadequacy, which the author has endeavored to show when explaining the *rationale* of cold applications in typhoid fever and pneumonia." Romberg has shown by experiments with injections into rabbits of Fraenkel's diplococci that the circulation is damaged by a paralysis of the vasomotors, while the heart itself remains unaffected. Van Santvoord's clinical observations show that the same condition of the peripheral vessels exists in lobar pneumonia. This author also states that the most obvious method of combating extreme dilatation of the peripheral vessels, to which cardiac failure is justly attributed, is to administer drugs which cause their contraction. Clinical observations have demonstrated that a most potent agent for this purpose (and better than drugs) is cold applications to the cutaneous surface. The application of cold water to the skin produces, like other mild cutaneous irritants, a narrowing of the cutaneous vessels which, followed by their tonic dilatation during reaction, causes the blood pressure to rise and improves cardiac action. The sphygmograph demonstrates that this dilatation of the peripheral vessels, following their narrowing in reaction, is not accompanied by loss of tone and is not passive. The author has given up the use of the cold, full bath in the treatment of pneumonia, chiefly because it is too disturbing to the patient, and also because the body cools very rapidly in this disease after any decided cold procedure.

The wet chest compress has therefore been substituted. This consists of several layers of old linen cloth wrung out of water at 60° or more, and repeated every half to two hours, according to the patient's condition and temperature. It is applied snugly around the entire chest and covered with flannel. The first effect of such a compress is a shock to the peripheral nerves, followed rapidly by a reaction which is conveyed to the central nervous system and thence reflected to the lungs, causing deeper inspiration and increased expectoration. The pulse becomes slower, more tense and resisting. The author states that he is not averse to the use of drugs, and often resorts to hypodermics of strychnine to tide

over temporary cardiac inadequacy, but depends almost entirely upon the cold compresses to meet the most pressing indications of improving the circulation and respiration, and reducing temperature.

The Hypodermic Injection of Silver Nitrate over the Course of the Vagi in the Treatment of Pulmonary Consumption.—MAYS (*Boston Med. and Surg. Jour.*, 9 Feb., 1899; *New York Med. Journal*, 11 Feb., 1899) has followed practically his belief, often announced, that the lesions of pulmonary consumption are the result of a defect of nervous tone, in which the vagi are seriously implicated. A suggestion was afforded by the operation of vagus stretching in severe cough associated with exophthalmic goitre and in epilepsy, and the same principle was sought to be carried out in the counter irritation resulting from the injection of nitrate of silver immediately over the course of the nerves in the neck. It was found that from four to seven minims of a two-and-a-half per cent. solution of pure silver nitrate answered the purpose best. The local visible effects of the injections show themselves in nodular, sometimes in diffuse, swelling, and in redness and pain. The number of injections necessary depends on circumstances. As a rule it is a good plan to begin by one injection on the side of the neck on which the affected lung is situated. In a week or ten days this is to be repeated, and in urgent cases it may be continued at intervals of three or four days. The deductions which may be drawn from this plan of treatment are (1) that the best results are obtained in incipient cases, both in regard to the symptoms and physical signs of phthisis; (2) that in most of the advanced cases of this disease the injections have a good and in some instances an exceptional effect on the symptoms and physical signs, and (3) that in the great majority of the far advanced cases they ameliorate the cough, expectoration and some other symptoms temporarily, but have little or no influence on the local condition of the lungs.

Paraldehyde in Asthma.—MACGREGOR (*The Lancet*, 11 February, 1899) reports the successful treatment of idiopathic asthma and other forms of spasmodic dyspnoea with paraldehyde. This drug is absolutely safe, and not only relieves the spasm but induces tranquil sleep. It does not give rise to a habit, and on this account is much more desirable than morphine or chloral. The mere obtaining of sleep is of great importance for the asthmatic patient, the strength is saved, and what is lost during the day is more or less regained. The prevention of the spasm is even a greater boon, seeing that each attack increases and prolongs the accompanying bronchitis. Iodide of potassium and tincture of lobelia as a rule do much to relieve the bronchitis and to lessen the spasm, but their effect is immensely increased by securing sleep and the prevention of the nocturnal spasms by means of paraldehyde. The drug occasionally causes sickness, and for this reason it proved of no use in a severe case of long-standing bronchitis and emphysema. Its disagreeable pungent taste makes it objectionable to children and nervous patients, but it is well disguised in cinnamon water and tincture of orange peel. It acts, as a rule, so rapidly that the dose ought to be taken after the patient has gone to bed. In adults it is best to begin with a dose of sixty minims.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Obstetrical Methods in Dublin and London.—In the *Canadian Practitioner and Review*, March, 1899, Dr. McIlwraith contrasts the obstetrical methods employed in the Rotunda Hospital in Dublin and in the Queen Charlotte's Lying-in Hospital in London. In the former institution the patient is delivered in the left lateral position, whether the case be normal or instrumental. For the diagnosis of the foetal position reliance is placed on abdominal palpation first, then on auscultation, and, lastly, on vaginal examination. Only one vaginal examination is advised, unless delivery is unaccountably delayed. To preserve the perineum, the heel of the right hand placed behind the arms pushes the head forward, the left hand supporting the preventing part and not allowing it to be delivered at the height of a pain. A hot creolin solution is allowed to play on the perineum if it requires much stretching. In tying the cord all loops of it are pulled gently out of the vagina and a ligature placed on it just outside of the vulva; when the ligature moves away from the vulva four or five inches it shows that the placenta has left the uterus. Perineal lacerations are repaired immediately with silkworm-gut sutures.

The Queen Charlotte's Hospital practice differs very widely from this, notably in the following particulars: In every case an ante-partum douche of perchloride of mercury, 1-3,000, followed by boracic solution, is given. The same douche is given to every patient post-partum. Numerous vaginal examinations are made, the diagnosis of the position of the foetus being determined mainly by this means. For the delivery of the placenta the practice is to wait half an hour with the hand on the fundus uteri, and then attempt expression from the uterus or vagina, as the case may be.

At the Rotunda open accidental ante-partum hemorrhage before the onset of labor pains is treated by plugging the vagina. After the onset labor pains the membranes are ruptured. In the concealed hemorrhage, Porro's operation, if the patient's life be in danger. In unavoidable hemorrhages, if before the os admits two fingers, plug the vagina and await dilatation; after dilatation a bipolar version is done and a leg brought down.

At the Queen Charlotte Hospital in open accidental hemorrhage the practice is to rupture the membranes in all cases and not to plug the vagina. In cases of placenta previa, Champetiere de Ribe's bag is tried, hoping that it will lessen foetal mortality. At the Rotunda axis-traction forceps — Barnes' long forceps with Neville's axis-traction apparatus adjusted to it — is the only kind used, and the forceps are removed before the head is delivered; while at the London Hospital they are left on.

In Dublin, pelvic presentations are left to nature, unless assistance is necessary, when firm pressure on fundus uteri is first tried. If this is not sufficient, a leg is brought down, if possible. For the delivery of the

after-coming head the *Prague* method is used when the head is in the pelvis; when above the brim, Martin's or Smellie's methods. Cephalic version is the usual practice in London — if the case is seen early enough. Occipito-posterior cases are treated in Dublin by forceps if labor is unduly prolonged, otherwise the cases are left to nature; but in London the hand is introduced into the vagina as soon as the position is recognized, and the occiput rotated to the front. The shoulders are rotated at the same time by the other hand on the abdomen.

Stercoraceous Tumors in Children. — COMBY, in an editorial (*Archives de Medecine des Enfants*, February, 1899), reviews the subject of constipation, which is common in children of every age. It may be a simple constipation or that due to some appreciable anatomical condition — such as elongation of the ileum, hypertrophy of the colon, congenital contractions, et cetera, when there is more or less of an intermittent or chronic occlusion. Where there is no primary or predominating lesion of the intestine habitual constipation is more often unrecognized and neglected and often grave symptoms arise. In such cases there is often an arrest of the fecal matter; a portion becomes hardened and ends by forming a veritable abdominal tumor, which has been called a stercoraceous tumor. M. Demons concluded that in children the accumulation of fecal matter in the intestine produces a clinical type, which he has called *stercoroma*. The diagnosis is often difficult and often the tumor is considered a neoplasm. In the evolution of this tumor there are three periods. The first he terms *période médicale* — when constipation alone exists, there being no loss of appetite nor pain; the second as *période chirurgicale*, characterized by the discovery of an abdominal tumor, without œdema or ascites, situated in the median line, hard, indented with secondary mammillary projections, preserving almost indefinitely the trace of the impression of the fingers and on rectal examination the mass is often felt. The third period is that of intestinal obstruction. In the first period the treatment consists of purgatives, electrical excitation; in the second, curretage of mass assisted by copious warm water injections, and when the symptoms are intense and the tumor does not diminish by more simple means, a laparotomy is indicated. Several cases were cited when this procedure became necessary and with excellent results.

DERMATOLOGY

Edited by F. C. Curtis, M. D.

The Carcinomatous Nature of Pigmented Moles. — T. CASPAR GILCHRIST, of the Johns Hopkins Hospital, in the *Journal of Cutaneous and Genito-Urinary Diseases* for March, 1899, discusses the question, "Are Malignant Growths Arising from Pigmented Moles of a Carcinomatous or a Sarcomatous Nature?" and gives a report of two cases (one in a negro), with a study of the histogenesis of pigmented moles.

The opposition raised by Unna, in 1892, against the sarcomatous conception of these tumors is clearly pointed out. The proof of the epidermal origin of the most characteristic constituents of moles was given by Unna by the result of certain studies, mainly upon moles in the early stages of development in infants.

Case I of the author was a negro, fifty-eight years old, who, four years ago, noticed a small, very black spot on the sole of the right foot. The pigmented patch grew slowly in size, and after cutting it with a razor grew very rapidly. The first metastasis was noticed two years ago on same leg, just below the knee. The primary and secondary nodules were excised, but eighteen months later the patient showed several nodules on left arm and in axilla of that side. The opposite upper extremity likewise presented several variously sized nodules, as did also the chest, abdomen, back, thighs and buttocks. The patient ultimately died, but at no time was there any lymphatic implication. Microscopically, several metastatic tumors were examined and showed cells of an epithelioid character, with a striking alveolar arrangement.

Case II was that of a physician who, seven years before, noticed a gradually growing pigmented mole on the left cheek. The tumor was removed, and histologic examination showed, in addition to marked pigmentary deposition, a considerable downgrowth of the epithelium of the epidermis. This case strongly demonstrates the carcinomatous nature of these pigmented moles. Since the epithelioid cells which make up the structure of the mole are of epidermal origin, any malignant growth springing from these cells should be regarded as of a carcinomatous and not sarcomatous nature.

Pruritus Senilis and its Treatment.—PARISOT, in the *Revue méd. de L'Est*, December, 1898, associates pruritus senilis with an auto-intoxication which has its origin in the intestinal tract and is accompanied by the incompetency of the kidneys present in old age. The blood is thus saturated with poisons, which produce a direct irritation of the nerve terminals. In old age the liver, in an auto-toxic sense, does insufficient work, the activity of the kidneys is diminished and, on account of retardation of digestion, the intestines always contain large quantities of fecal matter. The conclusion is that senile pruritus is a toxine-urodermia.

The senile changes in the skin produce only a local pruritus, never a general condition. The treatment which the author recommends consists of benzoic acid naphthol in daily doses of thirty grains, careful regulation of the bowels and a milk cure.

Erythema Nodosum in Connection with Articular Rheumatism and an Exanthema due to Mercurial Ointment.—SCHUSTER, in *Wiener Med. Wochenschr.*, Sept. 24, 1898, speaks of the rarity of this affection and its relation to rheumatism. The anatomy of the half-rounded nodular swellings in the deep layers of the sub-cutaneous cellular tissue, the serous

infiltration made up mainly of white and red blood corpuscles, mixed with some granulating cells, the rapid appearance and disappearance of the nodules and the accompanying general symptoms, speak for the fact that their origin has some connection with articular rheumatism. It is probable that the virus of articular rheumatism is carried out of the joints by way of the lymph channels to the surface of the body. A reactive inflammation is caused near the lymphatic glands, by which the lumen of the lymph channels is closed and a lymph stasis takes place. The localization of the nodules on the extremities in the neighborhood of the diseased joint, their appearance in places where there are blood vessels and lymph channels, probably prove the origin of the nodules in connection with diseases of serous membranes (as shown by the cases of endocarditis and pericarditis occurring after erythema nodosum). The author reports a case of this kind appearing at the time of a recurrence of a chronic articular rheumatism. The patient was a woman, aged 42; just above the right ankle, where the fibula can be easily felt, was a node as large as a hazel nut; along the upper part of the fibula, near each knee, a node as large as a walnut, and on the left arm, in the sulcus brachialis, another one equally as large. These were firm to the touch, and painful on pressure. Temp., 39 C.; loss of appetite, constipation and headache. Thinking of the probability of a previous syphilis, the author administered potassium iodide, and mercurial ointment to be rubbed in at first over the nodes. After the second application of the ointment a vesicular exanthema was noticed, which, although the mercurial ointment was at once stopped, extended over the entire extremities, chest, back and neck. The nodules were not affected in any way; in fact, several new ones appeared. The exanthema was treated with zinc powder and Lassars' paste, which caused it to disappear in a few days. For the erythema nodosum, solutions of acetate of lead, alum and salol were applied, under which treatment it got well in about ten days.

Aleppo Boil. — Dr. J. C. WHITE reported a case at the meeting of the Medical Board of the Massachusetts General Hospital, February 11, 1898 (*Boston Med. and Surg. Journ.*, 20 Oct., 1898). The patient was a little boy, an Armenian, who was the only child who escaped with his mother out of a town where a general massacre took place. He presented himself at the hospital for treatment of a scalp affection, but there were noticed upon his face cicatrices of the Aleppo boil, Delhi boil, Biskra, or furunculosis orientalis. It is an infectious disease occurring at all ages, especially in children, and affecting chiefly the parts exposed — hands and face — in the form first of a single small papule, becoming slowly pustular, and then denuded of its cover and forming a crust; the crust remaining adherent a long time, while beneath it a destructive process goes on, and the lesion spreads laterally, until, by the growth of a single one or the confluence of many in the same area, it affects large portions of the skin, sometimes forming a cicatrix more than an inch in diameter. It is inoculable and often affects several members of the same family, but the infective element has not yet been definitely determined. Several cocci

have been discovered in it, but the cultures of them are not inoculable, as the materials which are found in the discharge from the sore are. The scars last through life, are very deep and disfiguring in character and are very likely to be interpreted as the results of a syphilitic process. The importance of the disease increases with the advent of Armenians to this country, and several cases have already been seen.

Erythema Enematogenes. — At a meeting of the Clinical Society of London, Dr. F. G. STILL read a paper on "Enema Rash in Children" (*The Lancet*, 22 Oct., 1898). The rash has a characteristic appearance and course, as was apparent from the study of twenty-six cases which occurred at the Hospital for Sick Children, Great Ormond street. Usually a bright red patchy erythema appeared, especially on the front of the knees, the backs of the elbows, the buttocks and the face; in some cases, however, the rash was scarlatinaform, or the two forms might be combined. It appeared most often from twelve to twenty-four hours after the enema, and lasted usually from twenty-four to forty-eight hours; there was rarely, if ever, constitutional disturbance; the amount and time of retention of the enema and the duration of the preceding constipation did not seem to affect its occurrence. Scarlet fever, r  theln and measles were the exanthems for which an enema rash is most likely to be mistaken, the absence of constitutional symptoms, of sore throat, coryza and pyrexia serving to differentiate, in addition to the occurrence just after an enema, and the atypical distribution of the rash.

PSYCHIATRY

Edited by G. Alder Blumer, M. D.

An Epidemic of Ascending Paralysis Resembling Beri-Beri and Occurring in the Insane. — CHANTEMESSE and RAMOND, in the *Annales de L'Institut Pasteur* for September, 1898, give an account of a recent epidemic in the asylum at Sainte Gemmes, which closely resembles similar epidemics which occurred in Dublin and in the Alabama State Hospital at Tuscaloosa.

The epidemic occurred in 1897 and attacked mainly idiots and those suffering from chronic forms of insanity, such as general paralysis and dementia. The disease usually was observed first on account of the oedema which affected the limbs and was often most marked at night. It successively invaded the limbs and thighs, loins and the shoulders, finally reaching the arms, the chest, face, scrotum and then the serous cavities. This oedema of the skin and of the cellular tissue was of a very hard nature, and did not retain the impress of the finger. Together with the oedema there was noticed rapid and irregular action of the heart. Fever was not usually present. As the disease progressed the pulse usually became more rapid and weaker. At the same time with the oedema, certain other phenomena appeared, frequently nausea in the

morning, hiccough and repeated vomiting. The nausea was not accompanied by any great anorexia; in fact, the patients showed a certain avidity for food. Constipation with light colic and meteorism was more frequent than diarrhoea. Vertigo was constant. The patients complained of pain in the kidney regions and sides, and around the waist. They also complained of a sensation of pressure on the sternum. In many cases the strength was retained at the beginning of the disease and walking about was possible, but sometimes slight trouble in coördination was observed in the limbs. The tendon reflexes were diminished, and sometimes the urine contained albumen. In a good number of cases the exposed parts of the skin, particularly the face and the backs of the hands, took on a brownish color, absolutely similar to ordinary sunburn. The phenomena just described characterized the first period of the disease, which sometimes lasted as long as one or two months. In some cases the disease ended here with the patient gradually convalescent. In some of these cases there was a sudden return of the œdema, which obliged the patient to take to his bed for several days. The second period of the disease had as its prominent symptom paralysis. This sometimes came on insidiously; at other times it appeared quite suddenly and rapidly increased in severity, the paralysis affecting at first mainly the lower extremities. The patients were unable to walk without assistance. When helped, they moved the limbs after the fashion of ataxics; their feet glided over the floor the point of the toes turned somewhat downward, the inner margin of the foot slightly elevated and the dorsum rather prominent. Several cases showed Romberg's sign. In the more severe cases the upper limbs also became paralyzed, and in the fatal cases the other muscles of the body, including the diaphragm, participated in the process. The paralysis sometimes attacked the rectum and bladder. A third of the 150 patients showed bladder paralysis. In those cases where the diaphragm was attacked the picture presented was that of a rapidly ascending paralysis. The paralysis had marked characteristics. It was accompanied by intense muscular atrophy and very marked troubles of sensation. From the beginning the atrophy attacked symmetrically the muscles of the legs, thighs and the arms. The flexors resisted it better than the extensors. The flabby atrophied muscles were the seat of spontaneous pain under the form of incessant formication, cramps and extremely painful dragging sensations. Pressure on the muscles caused the patients to cry out. Hyperæsthesia and anæsthesia of the skin were noted — more rarely loss of the muscular sense. There were marked vaso-motor disturbances, consisting of great discoloration of the skin over the lower extremities, while the patient was standing up, the skin being normal in appearance in the recumbent position. The ophthalmoscopic examination showed nothing typical. During this stage portions of the skin sometimes showed appearances similar to those seen in pellagra, *i. e.*, irregular patches of erythema with subsequent drying of the skin and desquamation. Trophic troubles were observed in the form of bedsores, occasionally purpura and ecchymoses. In two or three instances exudation into the joints was present. Even after this

period of muscular atrophy some patients went on to recovery, gradually regaining their muscular powers and finally being able to walk once more. In the fatal cases the nervous symptoms gradually increased. Cardiac, respiratory and gastric symptoms became more marked; the pulse became miserable, respiration became rapid, the diaphragm gradually became paralyzed, mucus accumulated in the bronchi, the patient could no longer expectorate or swallow, and finally died after being moribund for several days, with profuse sweating which was sometimes odorous. There was no fever at this stage, but there was occasionally at the onset of the disease a slight rise of temperature.

The authors were able to make autopsies on two of the cases which died in the later part of the epidemic. The anatomical lesions present were slight congestion of the cord in the lumbar region, but no gross change, either in the brain or cord. The lungs were congested, and in one case there was an enlargement of the spleen, but beyond this nothing characteristic.

The microscopical examination of the tissues showed a well-marked neuritis affecting the nerves which had supplied the paralyzed parts, and also changes in the anterior horn cells, consisting of swelling, vacuolation and the loss of the chromatophilic granules.

From the bacteriological examination similar micro-organisms were isolated in both cases. They were a bacillus somewhat resembling the proteus, the ordinary colon bacillus, and a coccus which behaved like the streptococcus. The main interest attaches to the first-mentioned bacillus, which in animals caused marked nerve symptoms with paralysis of the posterior limbs. This organism occurred in the form of a medium-sized bacillus, sometimes short, sometimes in long chains. It colored by the ordinary methods and was not decolorized by Gram, and grew fairly well on the ordinary culture media. It was inoculated into animals through the circulation, the animals subsequently presenting fever, and, after seven or eight days, paralysis of the posterior extremities. The rectum and bladder were paralyzed and bed-sores appeared. Then marked signs of ascending paralysis followed and the animal died in from twelve to fourteen days. At the autopsy the micro-organism was recovered from the viscera; there was well-marked meningo-myelitis, but no neuritis could be made out.

The author was unable to make out any definite etiological factor for the epidemic. The water supply was excluded as a source. Rice had not been used at all for the patients. The epidemic was confined to patients, the attendants not being attacked. The author points out that the epidemic is very similar to those which occurred in asylums at Dublin and Tuscaloosa, which epidemic closely resembled beri-beri as it occurs in Japan and other eastern countries. In all these institutions there was great overcrowding.

ALBANY MEDICAL ANNALS

Original Communications

ADDRESS*

By WILLIAM OSLER, M. D.,

Professor of Medicine, Johns Hopkins University, Baltimore, Md.

[Dr. Osler was introduced by Dr. Ward, who said: Gentlemen, we have to-day a rather rare opportunity. I suppose that in the western hemisphere there is no man who is better known the world over, either as a medical author or as a successful practitioner of our profession, than Dr. William Osler, of the Johns Hopkins University, and it gives me great pleasure to introduce him to you.]

Dr. Ward, Gentlemen: It gives me a great deal of pleasure to speak to you, as I meet my colleagues and my friends when I meet medical students. It is a good many years since I sat on the benches, but I am happy to say that I am still a medical student, and still feel that I have much to learn.

There are one or two things that I would like to speak to you about particularly. In the first place, I would like to congratulate you that you are students in medicine to-day. The outlook in your profession has never been so pleasant. The probability is that you will see during your careers a much greater advance than even we have seen in our generation. I do not think that at any time has the outlook been so bright as it is to-day. I think in many ways that you are entering upon a profession in

* To the students of the Albany Medical College, February 1, 1899.

this country in a very much better state of organization — the equipment of the profession — the organization of the State boards — the fact that you will have as colleagues a much more highly educated set of men throughout the entire country will, I think, be a very great satisfaction to you in your careers.

The second point is with reference to the method of your work. I forget exactly when it was, I think when I was a first or second year student, I read an essay by Carlyle and was very much impressed with a little sentence which read, "Not to think of the things that lie dimly at a distance, but to do those which are clearly at hand," and I think, if there is one thing above another which contributes to a man's success, it is taking no thought for the morrow; let the morrow take care of itself, but do the day's work well; see that the duty which lies plainly at hand and is clearly before you is done regardless of to-morrow. I started in life — I may as well own up and admit — with just an ordinary everyday stock of brains. In my school days I was much more bent upon mischief than upon books — I say it with regret now — but as soon as I got interested in medicine I only had the single idea of doing the day's work faithfully and honestly, as well as I could, and I do believe if I have had any measure of success at all, it has been solely and wholly in doing the day's work that was before me just as actively and just as energetically and just as well as was in my power.

And the third point is, be careful when you get into practice to cultivate equally well your hearts and your heads. There is a strong feeling abroad among people — you see it in the newspapers and you see it in the Associated Press dispatches, that we doctors are given over nowadays to science — we care much more for the disease and the scientific aspects of it than for the individual. I don't believe it, but at any rate, whether there is that tendency or not, I would urge upon you in your practice in the future, to care particularly for John and Elizabeth, as George Eliot says — but I will not add especially for Elizabeth — but to care more particularly for the individual patient than for the special features of the disease. I am sure all of you must feel, and those of you who have only been a single term in the professional work, that you have entered upon a profession that appeals both to the heart and to the head; dealing as we do with poor, suffering humanity, we see the man unmasked, or

so to speak, we see him in his uniform, exposed to all the frailties and weaknesses, and you have got to keep your heart pretty soft and pretty tender not to get too great a contempt for your fellow creatures. The best way to do that is to keep a looking-glass in your own hearts, and the more carefully you scan your own frailties the more tender you are for the frailties of your fellow creatures.

I will conclude, Dr. Ward and gentlemen, with lines taken from Carlyle — from the same essay, I believe, that I referred to before, and which contain, after all, the philosophy of life: “Knowest thou yesterday with its aim and reason, and workest thou well to do noteworthy things? Then calmly await to-morrow’s hidden pleasures and fear not thou of the future whatsoever it brings.”

[Dr. Ward: I had hoped that Dr. Vander Veer might have said a few words, but his characteristic modesty seems to prevent. I am sure I voice the sentiments of all of you when I extend to Dr. Osler our thanks for his coming here and giving you the exceedingly good advice that he has done.]

SOME SCIENTIFIC ASPECTS OF MIND CURE.*

By SELWYN A. RUSSELL, M. D.,

Poughkeepsie, N. Y.

The writer of this paper is not a Christian Scientist nor an adherent of any similar “school of thought,” but simply an observer, so far as possible without bias or prepossession, seeking only for facts and willing to accept them for what they are worth, regardless of their association. And he finds even in that extravaganza known as Christian Science some facts of much value, though many, and especially physicians, who should be first to recognize that value have little or no appreciation of it. So by one party they are as much overestimated as underestimated by the other.

These modern methods of healing have met with a success in the cure of disease which is truly amazing to the materialist

* Read before the New York State Medical Society, February 2, 1899.

physician, and though their fundamental ideas are as old as history, the world, if it had not actually forgotten them, had surely allowed them to fall almost altogether into disuse. But, as usual with ideas, an intellectual appreciation is not enough, a practical use is necessary, and we should, therefore, not only possess them, but be possessed by them. And they are of greatest advantage to him only who abandons himself utterly to them; not that medicine is to be abandoned, but in certain cases medicine is only an obstacle, and the mind must be the sole reliance.

Although physicians have been willing to admit that by these methods functional or imaginary diseases might be removed, they have as strenuously denied that organic or structural disease could be so removed. Some ten years ago the writer of this paper spoke on this same subject before an audience of scientific men, and then thought he had said the "last word" when he had admitted what everyone was willing to admit, but on further investigation he is not so positive. He is obliged to confess, moreover, that he failed at that time to grasp the meaning of the fundamental idea of Mind Cure, so-called, and therefore scarcely touched the heart of the matter. So it is still with all the critics; they have no right comprehension of the bottom facts, and so their criticisms are almost altogether of outside or unimportant details.

The evidence of cures, though not all in, has already accumulated to a degree which ought to satisfy the most sceptical, and if some are still unconvinced it can be due to but one cause, namely, lack of information, ignorance of the facts, for the facts are not only open to all, but so conspicuous that such only as will not cannot see. And, therefore, for the purpose of this paper, it is assumed that organic disease is both caused and cured as much by mental as by physical means. If illustrations were necessary they might be given without number, but two or three of the commonest must suffice at present:

1. Laymen as well as physicians are familiar with the fact that a nursing child, for example, is often made sick by the milk vitiated by some mental disturbance on the part of the mother, which disturbance may be due to almost any cause, but always of a depressing character. If the depression continues a sufficient length of time the child's sickness may become chronic; and if it is of sufficient degree, or the child's resistance low, it may cause death. The books give frequent record of such cases. But what has

happened? Nothing less, and probably nothing more, than poisoning of the milk — some chemical change due to the mental change — and the milk, deteriorated as it is, is unfit for the nutrition of the child. It is safe to say that no woman is fit to nurse a child properly whose mind is frequently subject to disturbing emotions.

2. It is also a familiar fact that the digestive process may be interfered with by mental conditions. For example, let a perfectly well person hear bad news while in the act of eating, and very likely the appetite is at once taken away; and not only so, but if the emotion is violent the stomach may cease to act, or actually reject the food altogether (often after carrying it as an uncomfortable load for hours). Should the disturbance continue for days or weeks there is sufficient cause for continued stomach disorder; and if it become fixed there is cause for not only stomach disorder, but any or all of the many consequences, such as emaciation, insomnia, etc., in which any organ of the body may show signs of failure, the weakest giving way first.

3. It is also commonly known that depressing emotions are a frequent cause of bowel disorders, such as diarrhea, for example, and there is no doubt in the writer's mind that the chronic diarrhea so prevalent among the soldiers during the War of the Rebellion was caused primarily by mental depression. These cases are often met with in civil life also, a peculiarity being that medicine has little or no permanent effect; but change of circumstance, certainly change of mind, is followed by immediate improvement; that is, the cause being removed the effect ceases.

These most familiar illustrations sufficiently show the effect of mental causes, and a necessary inference is that if these things be true, almost any disorder or disease may be due to similar causes, which is without doubt the fact. Now it is impossible to suppose that the mammary glands in the one case, the stomach in the other, or the bowels in the third, are the only parts affected under such circumstances; but it must be that all the secretions and excretions also are altered in quality and suffer deterioration, so that the organic functions generally are interfered with; that is, the fluids of the body are all more or less vitiated, so that disorder is general, though more conspicuous in one part than another. Is it not evident, is it not a necessary inference, that in the same degree that the mind is disturbed the fluids of the body are vitiated, and as the fluids are vitiated just so are the functions

disordered? For example, if the gastric juice is impaired in quality the product of digestion will be below par, and the result is sure to be manifest in impaired nutrition. And it is these disturbances of nutrition which rule the largest number of chronic diseases, and also explain the appearance of many illnesses of acute character.

No less an authority than Strümpell has said that one-half the ailments of mankind are due to mental causes. Recently there came under my notice a young man who had suffered many years from chronic articular rheumatism together with psoriasis covering a large portion of the surface. These chronic diseases were apparently caused by nothing else than excessive fear, a sort of terror, on the appearance of clouds threatening a storm, for not till he got rid of this fear did all the symptoms of disease disappear, though he had been under the treatment of some of the most eminent physicians of the country at large, but with no permanent benefit. This fear must have caused some chemical change in the synovial fluids and perspiration; hence the disease when the fear was present and the relief when the fear was removed.

The emotions which cause disorder and disease are always of a depressing character, while on the other hand emotions of the opposite sort tend to health and the best performance of all the functions. Depressing emotions may be due to a variety of causes, as unhappy domestic relations, religious beliefs, society or business matters, one's health, etc., etc. Many persons, and especially children, suffer much from the thought of an angry God, or from fear of punishment, and in this way very great mischief has been done them. It is too often true, also, that adults look upon life as a "vale of tears", "an empty dream," or "a damned horrid grind"—a thing to be tolerated or endured rather than enjoyed. To such the Creator is merely an abstraction and exists in idea only, or he is an absentee and unconcerned about them. They think of him as non-resident rather than as an ever-present Being, in whom and by whom all things consist. It is perhaps the greatest scientific discovery of the age that all changes, all modification of form, all creation, goes on by means of *resident forces* not separable from the eternal and original Force which in religion we name God. And the highest function of science is to cause men to find themselves directly related to God. Given a creation, going on by means of resident forces and according to certain

laws, the mind is brought to an immediate view of the actual and immediate power of the Creator. But how often men indulge the thought that fate is against them, or that they are sadly handicapped by heredity; briefly, that the powers of the universe are hostile to them and life is but a struggle against odds. "Man is a feeble unit in the middle of a threatening Infinitude."

On the other hand, man should think of the laws of the world as friendly, which they certainly are to him who courts them by right conduct. As Browning says: "God's in his heaven, and all's right with the world." Man should realize that every manifestation of force, in the atom as well as in infinite space, is the immediate effect of an omnipresent Power. Of this immanence President Eliot, of Harvard University, recently very truly said: "This thought, tender and consoling to human weakness and insignificance as a mother's embrace, but sublime also as the starry heights and majestic as the onward sweep of ages, Science utters as the sum of all its teachings and meditation, and applies alike to the whole universe and to its least atom—'The eternal God is thy refuge, and underneath are the everlasting arms.'" Which means simply that this infinite source of strength is in man as the source of his strength, which idea gives him new force, puts new vigor into him, uplifts and fortifies him, so that his resistance and endurance are both distinctly increased.

Again, the events of life are not in themselves evil, though they may at times and from a wrong point of view seem certainly so. If they be injurious to us it is because of our attitude, or because we do not handle them properly. It was that pagan, Seneca, who so wisely said: "The wise man cannot meet with misfortune, for outward calamities are but divine instruments of training, designed to exercise his powers and teach him the indifference of external conditions." If the cosmic powers then are friendly, we may well banish fear and settle down to something akin to contentment and composure, in which the healing powers of nature can do their best. The case against us is not so bad after all, for we find at last that the only spot in our sunshine is but the shadow of ourselves. We must stop wasting our vital powers by opposing the events of Providence, and learn to look upon the laws which govern everywhere as beneficent and friendly, and which will contribute to our best success if we live in obedience to them. Man must be receptive to the upper and better influ-

ences, and shut out such as trouble and annoy. It is a great and needless waste of energy to indulge in such depressing emotions as anger, envy, jealousy, malice, fear, etc.—anything, in short, which is disagreeable or gives dis—ease.

A flood of light has of late years been thrown on the origin of many of our ills, both simple and severe, and we begin to see that more depends on the predisposing than on the exciting cause. The whole matter is largely one of resistance, which, if up to par, exciting causes prove insufficient to bring on disease. To know this and practice it is to keep well and be able to advise others. Grip, pneumonia, typhoid fever, etc., would not so often occur were not the resistance lowered, and often by easily preventable causes. Whatever lowers the resistance — as fatigue, anxiety, fear, grief, etc.—determines the onset of disease.

In the opinion of the writer it is the inculcation of some such ideas as the foregoing which enable the mind-cure folk to cure disease in so many instances in which medicine fails. And physicians should be more fully aware of the potency of these mental forces. If mind activities can create chemical and atomical changes, may not much of the physiology and pathology of the animal economy be due to psychological processes? When examining a patient as careful search should be made for mental as for physical causes, but the unfortunate bias of the average physician leads him practically to ignore mental causes, which explains his frequent failures and at the same time the success of mental means. As long as the present prejudice exists among physicians, just so long will there be a legitimate demand for such healers as are supplied by Christian Science, Mind Cure and other similar methods.

And since it is clear that disease often is really cured by mind forces, it seems to me necessary not only that physicians should be informed in the matter, but that students of medicine should also be taught the fundamental principles. It is a reflection on the physician to treat certain cases with drugs when mental treatment alone is indicated, for he should be able at the outset to distinguish mental cases and meet the requirements. Many chronic invalids are such simply because the real cause of disorder is misapprehended, and so what might be easily cured is allowed to go on indefinitely. These cases will receive more intelligent treatment only when the physicians become more familiar with

mind forces, but at present this important branch of study is sadly neglected.

In the last analysis this so-called mental healing is a very religious thing, as it aims not only to cure disease, but quite as much to renovate the character. Indeed, it seeks first to cast out the devil in order the better to cure disease, assuming that disease is due largely or altogether to wrong living, in turn due to wrong thinking. It teaches that nature's laws are beneficent, and that the forces all about will aid us if we put ourselves in the right attitude, which is that of the thoroughgoing optimist who sees only good in everything. He is in possession of the veritable philosopher's stone which transmutes everything into gold, puts him in harmonious relation with his environment and teaches him that all right success in life depends on the proper recognition of the soul as of first importance, the body as subordinate.

The temptation is strong to speak of the comparative value of the different forms of mental healing, and though this is hardly the place for such an exposition perhaps a word may be allowed. There are three principal forms, known as (1) Mind Cure or Mental Science, (2) Christian Science and (3) Faith Cure or Divine Healing. Their aims are essentially the same as are their fundamental ideas; but their theories differ in detail and they denounce each other in very bad form. They all aim to renovate character as well as to cure disease, and in many cases this aim is accomplished. Christian Science, like Faith Cure, has founded a sect and built a church, organized a Sunday School, and endeavors by means of a most vigorous propaganda to disseminate its opinions. Of course it is not only needless but absurd to add to the already too numerous sects; absurd also to build a church, etc., for these things serve only to obscure the ideas they are supposed to embody, weaken the vital truths, and are really so much error.

Although Christian Science has at bottom some good ideas, which it blindly tries to realize, it is on the whole a most melancholy mixture of fact and fancy and contains a good deal of consecrated nonsense. Some truths it does teach for which it is to be commended, but with every truth a number of errors are mixed, so that the net result is at best a queer one. A man may indeed get health, for which he may be truly thankful, but with health he may get numerous wrong notions (did he know it), for which he might be heartily sorry. Among the absurd notions

taught are, that matter has no existence; that the senses are always deceptive; that "heat and cold are products of the mind;" that "nothing man can say or believe regarding matter is true," etc., etc. Mrs. Eddy is the only true prophet and revelator, and her book, "Science and Health," which no sane man can read and retain his sanity, is an inspired book from cover to cover, its errors as well as its truths, down to the last solemn solecism. They would not part with a single impropriety, for all is alike sacred! This excess of credulity leads them into all sorts of extravagances. And their theories as practiced by themselves, probably in an ideal manner, have not as yet availed to keep the breath sweet or the health good—not so much the fault of the ideas, perhaps, but because they are not sanely balanced with others equally necessary, which they ignore. They are men of one book, one idea, and keep the eye open to but one point of the spiritual compass (they have no other), and therefore lose the light streaming in from all other points. This quasi-deification of one person and excessive credulity blind them to the absurdities and limitations of Christian Science, and foster in them a ludicrous narrowness. Not being able to classify the few fundamental facts, they are classified by them, and they can therefore find no fault if they are judged by this limitation. But within the sect there are already signs of disintegration and many voices of protest are heard, the more intelligent and liberal refusing to be bound down rigorously to one book and one idea, and so many are going over to Mental Science in which they have more freedom.

Faith Cure or Divine Healing (under Rev. Dr. Cullis, of Boston, and Rev. Dr. Simpson, of New York) aims also to renovate the character and cure disease, and it must be acknowledged that it also succeeds in many cases; but it depends on the narrowest and most literal interpretation of the Bible, in this way teaching numerous errors.

Mental Science, or Mind Cure proper, has the same aims and accomplishes the same results as the other forms of mental healing, but is much more scientific in its methods, as it endeavors to teach and practice nothing which does not commend itself alike to reason and to common sense. Having no creed, no church, no propaganda, no organization one is pressed to join, it gives what it has for what it is worth, asking no subscription to creed,

clapping on no badge, and therefore accomplishes in much better form all that the other methods more or less blindly aim to accomplish.

But the time is not far distant, I hope, when physicians will be sufficiently informed on this important matter to enable them to properly treat these mental cases in their regular practice, for not till then can it be said that the Christian Scientist's occupation is gone.

A necessary inference from the foregoing is that many diseases and disorders are due only to unfavorable mental conditions, continue as long as the mental cause continues and cease only when that cause is removed.

For the ANNALS.

A CASE OF FAMILY SUSCEPTIBILITY TO FACIAL PARALYSIS.

By WILLIAM BROWNING, M. D.,

Brooklyn, N. Y.

It is well known that a person may have recurrent attacks of Bell's palsy, and that both sides may be affected either in unison or with an interval between the attacks. These diplegic and recurrent cases, when of the common (neuritic or so-called rheumatic) form, may indicate a special liability in the individual affected. Little notice, however, seems to have been paid to any tendency of several persons in the same family to have such attacks. As it is usually soon recovered from, it is forgotten unless something special freshens up the family memory. It does not attract attention and interest like the progressive forms of hereditary nervous disease.

Not infrequently we see this trouble in persons where some other member of the family had previously been similarly affected. But such evidence is only striking and instructive when backed by the statistics of a large number of cases. Recently, however, a case has come under my observation that is in itself fairly conclusive. It is that of a family where this has occurred four times in two generations, and may be worth giving in sufficient detail to illustrate.

Of a family of fourteen children in the old country, two (sisters) developed facial paralysis in later life. The first one had already borne a large family of children, when, on moving into a new house, she contracted this trouble from a cold. In her case it remained permanently. After an interval of some years the other sister, who was several years older and the mother of one child, suffered a like attack. With her the mouth facial recovered, but she could never again close the eye. It is thought that in these cases the permanency of the affliction was due to lack of all medical care. From the facts given, the onset in each of these must have been at or after middle life.

The other two cases were in the daughters of the youngest sister of the above, and the only ones of her children that lived to grow up. The elder of these, twenty-six years old, unmarried, developed right facial palsy late in the fall of 1898, from heedless exposure by a cold window. It was discovered the next morning. She has made a fair recovery.

The other, Mrs. F., twenty-four years old, referred to me by Dr. S. B. Childs in January, 1899, developed it on the same side as her sister and about ten days after her second confinement. She was still in bed. A window had been left open, and the face was found drawn in the morning. It had all the characteristics of ordinary Bell's palsy, beginning with stiffness, some pain and distortion of that side of the face, but no aural disturbance. When first seen, a month after onset, there was no change in palate or uvula and no trouble with taste. All peripheral branches of the nerve were involved, and at first no reaction could be obtained, though it has since made good progress. Although not nursing her baby, she was somewhat anaemic. She is a bright, active and otherwise very healthy woman. For present purposes there is no occasion to go more fully into the details of her case.

No further evidence of nervous trouble in any member of this family could be elicited. It is apparent from these cases, as well as from one mentioned below, that the family form of facial paralysis may be either transient or permanent. In its characteristics it does not otherwise differ from the general run of idiopathic or rheumatic cases.

As a rule our text-books either ignore this matter or directly

deny it, or at most call it an accidental occurrence. In special articles, however, may be found corroborative observations.

E. Neumann (*Arch. de Neurolg.*, 1887, and May, 1888, seen in abstracts), besides other evidence supporting Charcot's view that there is an hereditary disposition towards the appearance of this palsy, relates a case where this trouble had attacked members of one family in three generations.

Bernhardt (*Berlin. klin. Wchr.*, 1888; *v. Centbl. f. med. Wissc.*, 1889), while not inclined to acknowledge "any nervous disposition" (anent Neumann), nevertheless says that in certain families several members may suffer from this affection.

Hübschmann (*Neurlg. Centbl.*, 1894, p. 850) suggests that where several members of one family suffer, it may be attributed to their living under like hygienic conditions. This certainly cannot hold for my cases. Still he does not entirely discard a nervous pre-basis, so to speak.

Barkas (*Lancet*, 1895, I) gives a case of two brothers who were attacked a month apart, in consequence of influenza. The father had suffered from an attack twenty years previously

J. Neumann (*Neurlg. Centbl.*, 1895, p. 859) calls attention to the striking occurrence of this affection in certain systemic diseases, as diabetes, syphilis, tabes, as evidence in them of a weakening of the nerve-substance. In his second case, which recovered promptly, the father exhibited a permanent facial palsy.

Perhaps the latest writer to treat of this is L. Fabre (*Thesis*, Montpellier, France, 1898-9), under the title "De l'origine névropathique de la paralysie faciale périphérique primitive, dite a frigore."

Doubtless the list of references might be materially lengthened, but these amply suffice. It is clear that in some families there is a special susceptibility of the facial nerve to influences that in the general run of people produce no effect. Perhaps in most cases of rheumatic facial paralysis there is a special vulnerability of this set of neurons. In some reported cases of the present kind, a careful study of the family and personal history has furnished other evidence of nervous troubles, suggesting that the neurons as a whole are weak.

Besides its theoretical interest, this matter has a certain practical bearing. One reason for the special frequency of this form of paralysis in this particular nerve is evidently not alone its

exposed course, but the fact that it is left exposed. Other motor nerves near the surface are protected from cold and real exposure by clothing. It follows that those persons liable to this trouble should seek to avoid it by shielding their facials from all draughts and chilling.

FRACTURE OF THE CERVICAL VERTEBRÆ.*

By CHAUNCEY P. BIGGS, M. D.,

Ithaca, N. Y.

For several reasons I have considered this case of fracture of the cervical portion of the spine of sufficient interest to report to the State Medical Society. The history of the case was briefly as follows: My patient, Mr. G., seventy-five years old, remarkably strong and vigorous for one of his age, was thrown backwards from the back seat of an ordinary platform spring wagon and struck on the ground on his head. The accident was the result of the sudden start of the horse, and the fastening of the seat giving away. He was practically helpless from the moment of the injury, but whether the paralysis was complete at that time it was impossible to say, as he was driven two miles in a phaeton in the upright position, with only slight support to his head, before he was examined by a physician. He said "that he suffered more during this ride than during the whole of the remainder of the four months that he lived after the injury."

Mr. G. was examined by two surgeons from New York city within forty-eight hours of the time of the accident, and they both pronounced it a fracture of the cervical portion of the spine between the sixth and seventh vertibræ, with a dislocation forward of the upper fragment. A bony prominence could be easily felt in the pharynx by introducing the finger through the mouth. I have the spinal cord and a section of the spinal column here that I will be glad to show to any one who cares to see them. I also have some drawings that will give you a very good idea of the nature of the fracture. You will see that the fracture is not just as diagnosed by the surgeons. The peculiar

*Read at the Ninety-third Annual Meeting of the Medical Society of the State of New York, January 31, 1899.

nature of the fracture seems to me to be of considerable interest, and to have a rather important bearing upon the relief to be expected from an operation. If, as was supposed, the upper portion had been dislocated forward, and as a result of this dislocation the spinal canal had been obliterated, the injury to the cord must necessarily have been irreparable, but we find that while the direction of the canal was changed, the specimen shows that it was not obliterated, and that the injury to the cord resulted from a spiculæ of bone from the posterior arch of the fifth vertebræ, which penetrated the cord. The deformity found in the pharynx was due to the crushing of the body of the fifth vertebræ and not to a dislocation and the pressing forward of the upper portion. The prominence, as the specimen shows, was below the injury and not above; an angle was made by the crushing of the body of the fifth, and in the upper portion the course of the canal was thrown forward. The throwing forward of the upper end of the upper fragment produced a deformity that was very marked and very characteristic. It would seem that the fracture found must be the result of violence applied in two directions. Probably the crushing of the body of the fifth was the result of the blow on the top of the head, while the head was thrown forward, and the fracture of the arches of the fifth and sixth was the result of direct violence to the back of the neck. It was the latter that produced the injury to the cord. The section of the cord shows the spiculæ of bone which produced the injury adherent to the cord. Neither of the surgeons that examined this patient considered an operation justifiable. I am not at all sure that an operation would have afforded any relief, yet I think that the possibility of getting some relief from an operation was much greater than it would have been if the conditions were as was supposed. The points that were of special interest in the clinical history were: the clear, keen, mental condition, the clean cut lines of anæsthesia, the complete paralysis of all muscles that received their nerve supply below the point of injury, the sub-normal temperature, and the freedom from septic infection of the urinary organs. Mr. G. was a man of more than ordinary ability and was well known in the community in which he lived for his keen mental perceptions. These mental qualities were retained during the greater part of the time that he lived after the injury to a most marked

degree. The drawing gives the clean cut lines between sensation and complete anæsthesia. There was practically no change in these lines during the four months that he lived after the injury. The only muscles in the body below the point of injury that were not completely paralyzed were the flexors of the arms and the diaphragm. The flexors of the arm received their nerve supply from the musculo-cutaneous nerve, which received some fibers from the fifth and sixth cervical nerves, which make their exit from the spinal canal above the point of injury. The fore arms and hands are supplied by nerves that are given off lower down and were completely paralyzed. The diaphragm was the only respiratory muscle that was not paralyzed. This muscle, as we remember, is supplied by the phrenic nerve, which is made up of fibers derived from cervical nerve as high up as the third cervical. The sub-normal temperature was very marked at times, and it interfered very seriously with the prevention of bed sores, after the second month. Several times the mouth temperature went below 95° Fahr., and for days it would only reach the normal temperature once or twice during the twenty-four hours. When he could be kept on cold water pillows the skin on his back remained in good condition, but when the temperature was much sub-normal we could not use the cold water pillow. If the water was allowed to become warm in the water pillows, or we used air cushions, the effects were shown on the skin of his back in a very few hours. He had the constant care of three trained nurses, so that everything was done that could be done in way of rubbing and changing of position, in order to relieve pressure over bony points. He seemed to have sensations of heat and cold in parts of his body that were entirely without sense of touch or pain. His bladder was entirely paralyzed, and the urine was drawn three times during every twenty-four hours, and each time his bladder was washed out with an antiseptic solution. In this way the bladder was kept in excellent condition and did not become the immediate cause of death, as so often happens in these cases of fracture of the spine. His appetite was good the most of the time and he slept well, but his weight constantly decreased, the bed sores became more and more difficult to heal, and at the end of four months he died of inanition and exhaustion.

For THE ANNALS.

SERVICES OF MEMBERS OF THE ALUMNI ASSOCIATION OF THE ALBANY MEDICAL COLLEGE IN THE SPANISH-AMERICAN WAR.*

By HARRY SEYMOUR PEARSE, M. D.,

Historian of the Association.

The following is a partial list of the members of the Alumni Association of the Albany Medical College who served in the Spanish-American war. It is far from complete and indicates only those members whose names or record of service we have obtained up to the present date. It will require considerable time to obtain a full list.

Three of the members enlisted immediately after graduation, two subsequently resigned and one was mustered out with his regiment,

The records show that the Albany Medical College furnished from among its graduates over two hundred surgeons for service in the Civil war, a record to be proud of. For obvious reasons the number who served in the recent war will be much smaller.

Timothy E. Wilcox (Major, U. S. A., class '64), is a veteran of two wars, having served in the Civil war as assistant surgeon of Sixth New York Heavy Artillery. Service in recent war, chief surgeon, Camp Black, L. I., July to October, '98. Now on duty with First Army Corps in Cuba.

Benjamin F. Pope (Major, U. S. A., class '64). April 16, '98, took field with 17th U. S. Infantry, went to Tampa, Fla. Appointed chief surgeon of Fifth Army Corps. Appointed lieutenant colonel and chief surgeon, U. S. V. June 1, '98; went to Santiago. Returned to United States August 28, '98. Mustered out of volunteer service October 31, '98. Commissioned lieutenant colonel and deputy surgeon general in regular army December 27, '98. Now on duty at recruiting rendezvous, Columbus barracks, Ohio.

Lewis Balch (Honorary Member, Alumni Association). Commissioned major and surgeon of Second U. S. V. infantry, May '98. After mustering out of Second Regiment, appointed brigade surgeon and ordered to duty as chief surgeon, Second Brigade, Second Division, Second Army Corps.

* Appendix to Historian's Report.

Later he was ordered to Cienfuegos, Cuba, and appointed a sanitary inspector of Cuba.

Willis G. Macdonald (Albany, N. Y., class of '87). Commissioned as brigade surgeon, June 16, '98; detached as chief surgeon from Second Army Corps and detailed to Fort McPherson, Georgia, in charge of surgical division of hospital. Resigned, August 12, '98.

J. Wilson Poucher (Poughkeepsie, N. Y., class of '83.) Commissioned as first lieutenant and assistant surgeon of Two Hundred and First Regiment, N. Y. V. Infantry; detached and placed in charge of division hospital, Camp Black, L. I.; held this position, with that of medical supply officer and acting commissary of subsistence till date of resignation, September 10, '98.

Edgar Vander Veer (Albany, N. Y., class of '98). Appointed acting assistant surgeon, with rank of first lieutenant, May 6, '98; assigned to duty at the United States general hospital, Fort McPherson, Georgia. Resigned, September 1, '98.

Pierce J. O'Brien (Cohoes, N. Y., class of '98). Member of Hospital Corps of Twelfth Separate Company N. G. S. N. Y. Mustered in as private of Company C, Second Regiment U. S. V. Infantry May 17, '98. Worked with Hospital Corps of that regiment at Chickamauga and Tampa. Mustered out of service, December 6, '98.

Robert W. Andrews (Poughkeepsie, N. Y., class of '98). Appointed acting assistant surgeon, with rank of first lieutenant, July 19, '98. Detailed to First Army Corps field hospital. Detached and ordered to Porto Rico, September 24, '98, to Nineteenth U. S. Infantry (regulars), at Adjuntas. Post surgeon from October 8th to October 24th. Detached; detailed at United States general hospital, San Juan, Porto Rico. Resigned January 18, '99.

Burton S. Booth (Troy, N. Y., class of '89). Commissioned, June 30, '98, as major and surgeon of the Two Hundred and Third Regiment, U. S. V. Infantry. Mustered in, July 4, '98. Resigned, December 1, '98.

George Coe Merriman (Scranton, Pa., class of '97). Mustered into U. S. V. Infantry, as hospital steward, May 13, '98. Commissioned first lieutenant and acting assistant surgeon, U. S. V. Infantry, Thirteenth Regiment, Pennsylvania, Second

Army Corps, July 15, '98. Mustered out with Regiment April, '99.

Charles E. Davis (Albany, N. Y., class of '91). Mustered into service, May 6, '98, as major and surgeon, First U. S. V. Infantry. Went to Honolulu with regiment; there detached and ordered to establish United States general hospital. Remained in charge of hospital after regiment was ordered home. Major Davis resigned and returned home (Albany) in February, '99.

Walter F. Robinson (Albany, N. Y., class of '84). Enlisted as private in First U. S. V. Infantry, June 28, '98. Appointed acting assistant surgeon, September 27, '98. Went to Honolulu with regiment; subsequently received commission as first lieutenant U. S. V. Infantry. Mustered out with regiment at Albany, N. Y. in January, '99.

The following are known to have served but their records have yet to be obtained: James E. Smith, '89; James E. Brennan, '89; Lewis T. Griffith, '97.

NOTICE.—The Historian requests graduates who served in the Spanish-American war, or any who may know of graduates who saw such service to communicate with him. By so doing they will render the Alumni Association a valuable service and assist greatly in obtaining a list which it is desirable to have complete.

1 South Hawk Street,
Albany, N. Y.

Correspondence

MUNICH LETTER.

MUNICH, BAVARIA, *April 26, 1899.*

The clinics and lectures were to begin over a week ago, but most of them have only just commenced to run on schedule time—eight days late. The main reason is the lack of students, who appear in no hurry to return to the University, although they showed unseemly haste in leaving two weeks before the last term closed. The German medical student is generally regarded to be a hard and conscientious worker, who studies through two long semesters each year and who scorns holidays in his thirst for knowledge. Personal observation in two large and famous

universities and the testimony of several representative German students convince me that, as a class, the medical students over here do not have to work so hard, nor do they apply themselves so diligently, as their colleagues in America. Of course, there are many notable exceptions. The winter semester opens late in October, but the majority of students do not arrive before the second or third week in November. At Christmas they are given two weeks' holiday, but they take three or more. The term closes in the middle of March, but the students leave about the first. They then have two months' rest and return for the summer semester early in May, and I am assured that very few students are in Munich after the middle of July. This gives them over six months of vacation every year, notwithstanding the two semesters.

During term time they do not work like our students. The average student would not think of studying at night. All the university towns have numerous cafés and restaurants, which are filled night after night with the same students. Not long ago, talking with a German physician, I mentioned that our students are accustomed to study at least five evenings in the week, and he could not believe it, his only comment being: "Impossible! Impossible!"

They have a law in Germany — at any rate, in Munich — which makes the consent of relatives necessary before an autopsy may be performed. I was not aware of this until a few days ago, when a patient in one of the public wards died, upon whom, for several reasons, an examination would be instructive. The husband was very obstinate in his refusal and no post-mortem was made. To be sure, such refusals are rare over here, owing, perhaps, to the greater enlightenment of the people or stronger powers of persuasion on the part of the physicians.

Many notable men will attend the seventy-first meeting of German Scientists and Physicians, which occurs in Munich from the 18th to 22nd of next September. The sessions will be held in the large Royal Opera House. A partial list of the speakers and topics has been announced. In the Natural Science Division, Dr. Fridtjof Nansen will read a paper on "Expeditions to the North Pole and Their Results." Professor Förster, of Berlin, will elucidate some astronomical points, and Professor Boltzmaur, of Vienna, will speak on some topic not yet announced.

A few of the subjects in the Medical Section will show the nature of the programme. Professor v. Bergmann, of Berlin, who this past month was elected President of the German Surgical Association, will read a paper entitled "The Acquisition of Radiography for the Management of Surgical Diseases." "Science and the Art of Healing" will be presented by Professor Birch-Hirschfeld, of Leipzig, and Professor Klemperer, of Berlin, will speak on "Justus v. Liebig and His Influence on Medicine," which will be very appropriate, as Munich was the scene of his later work.

Many American physicians will learn with regret the departure of Dr. A. Martin from Berlin. His courses were very attractive and valuable for foreigners. Dr. Martin left to take charge of the obstetrical and gynecological department at Greifswald. In Berlin, he had a private obstetrical clinic for the instruction of his students, and in order to have plenty of material he gave a premium of three marks to each midwife who brought him a case. This caused a great deal of hard feeling among the physicians in the neighborhood, as it injured their practice and lessened their obstetrical opportunities. Notwithstanding this, Dr. Martin was most popular with all the Berlin physicians, who are genuinely sorry to have him leave their midst.

H. L. K. SHAW.

Editorial

The Influence of Exercise on the Body Temperature

Professor Penzoldt, of Erlangen, and Dr. Brigelen, his former assistant, have, in the *Münchener Med. Woch.* (April 11, 18, 25), written an exhaustive article on the influence of exercise on the temperature of the sick and the sound. Professor Penzoldt, who himself is a victim of pulmonary tuberculosis, published a few years ago some observations on the rise of temperature in phthisis after exercise. He now publishes the results of very careful and accurate experiments to see what bearing this might have as an early means of diagnosis. The results obtained are interesting and quite suggestive. The temperature was taken very carefully per rectum in each case before and after the exercise, which consisted usually of about an hour's walk over a level road.

Elaborate records were made of the patient's condition, weather conditions, etc. Numerous trials were made on eleven healthy persons of various ages, as well as stout people, convalescents from acute diseases, emphysema, chronic bronchitis, chlorosis and anæmia, valvular heart disease, icterus, diabetes, proven and suspected cases of pulmonary tuberculosis. The results showed that a rise of temperature (100.5° F. and over) occurs after exercise in stout people, convalescents, chlorosis and anæmia, icterus and tuberculosis. In the latter disease, all the suspected cases whose temperature rose over 100.5° F. showed later unmistakable signs of the disease. As the other conditions can easily be excluded, a test walk may prove of value in the recognition of suspected tuberculosis, especially when it is desirable to exclude chronic bronchitis. These observations should have an important bearing on the therapy of these disorders. If a short walk in certain diseases raises the temperature over 100° F., its influence on the system must be bad, and therefore is contra-indicated.

The familiar complaints of convalescents and anæmia patients after slight exercise find explanation, perhaps, in the rise of temperature. The authors conclude by recommending that no exercise be prescribed in cases of tuberculosis, anæmia, icterus and convalescents until the rectal temperature shows no increase after some slight exertion.

Epidemic Suicide	During the spring months Albany has been the scene of a number of suicides. It experienced one of those epidemics which every city of any size at intervals must expect; in fact, during the past ten years, the frequency of epidemics has greatly increased in the larger cities. A study of them shows that each is characterized by the special nature of the method used for self-destruction. In several epidemics in New York city, those methods which produced the most suffering, strange as it may seem, were the most frequently used. Four or five years ago oxalic acid was employed in a large number of cases occurring within a few days. This epidemic was shortly followed by another with carbolic acid as the agent; there were also two or three others where Paris green was employed. In the recent epidemic in Albany, carbolic acid was the principal agent. A number of cases of
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drowning frequently follow each other so closely that the series constitutes a small epidemic. There are, frequently, isolated cases of suicide by self-inflicted wounds, jumping from great heights, the injection of opium, morphine, arsenic, rat poison, Paris green, aconite, strychnine, etc., but it is an undisputed fact that poisonous drugs are the agents most often employed. There are numerous cases, too, where it is impossible to determine whether the drugs were taken by accident or design. For these two reasons alone, if for no others, and there are many, the public should be protected against the possibility of mistakes to the extent that legal enactment will furnish such protection.

There would be fewer epidemics of suicides if poisonous drugs were made more difficult to procure, and fewer accidents would occur if such drugs were sold in bottles distinguishable by sight and touch from ordinary bottles. Attempts to secure such protection by legislative enactment have been made in New York State for a number of years, but all have failed. In the last Legislature a bill regulating the character of the bottle or package used in dispensing poisonous drugs was strongly opposed, because it contained a clause which exempted patent or proprietary medicines from the provisions of the act. Whether it would have been wise to have this law with its exemption is a question. Some have said that part of a loaf would have been better than none, and that few patent medicines contain poisonous ingredients; however, be that as it may, it is clear that some protection against mistakes is due the people, and the commonwealth also against crime.

It is the law now that whiskey shall not be dispensed except upon presentation of a prescription by a physician. Why should carbolic, oxalic or sulphuric acid, opium, strychnine, aconite and other virulent poisons be dispensed for the asking?

State Medicine

Edited by Harry Seymour Pearse, M. D.

Medical Legislation for 1899.—The medical bills brought before the recent New York Legislature exceeded those presented in the Legislature of 1898 by about one hundred in

number; were far more effective in their provisions, more general in their application, and indicated a general advancement of the education of the people in sanitary control and improvement, and in the prevention of disease by hygienic measures.

In all, about 238 bills were introduced; 44 passed one house, but failed in the other; 62 passed both houses; of this number, three were vetoed by Mayors of cities, 59 going to the Governor, two of which were subsequently recalled; four were defeated by vote, and the remainder died either in committee or on the calendar. Synopses of all the important measures were printed in the columns of the ANNALS during the session. It only remains to be told, in a general way, what was and what was not accomplished by enactment.

There was the usual large number of local bills providing for the improvement of sewerage systems, disposal of garbage and protection of local water supplies, many of which became laws. There were also many amendments to the agricultural and public health laws relating to adulterations of food stuffs and coloring matters in dairy products. The bills for the relief of and exemption from taxation and water rents of charitable institutions were more numerous than in the past; but two or three of these became laws because of the desire to keep down the tax-rate; in fact, all of the medical bills which carried appropriations with them, except those for the maintenance of the Craig Colony for epileptics and the Dannemora State Hospital for insane criminals, were killed in committee for the same reason. Many general bills of great importance met a similar death, to wit:—that providing for the establishment of a State hospital in the forest preserve for the treatment of tuberculosis; this bill was the result of a very comprehensive and valuable report of a special committee, appointed by the Legislature of 1898, on establishing a State hospital for the treatment of tuberculosis; also that bill providing for the payment, by the State, for the treatment of one hundred patients annually at the Loomis Sanitarium for consumptives in Sullivan county; also another, providing for the establishment of a State school of public health in New York city. In the fight for legislation to provide against the increase of tuberculosis but little was gained; the bill providing for the establishment of tuberculosis hospitals by cities of the first-class, outside their corporate limits, passed both houses, but by the

mistake of a clerk was sent to the Mayor of Buffalo, who promptly vetoed it; however, the Governor is the only executive having jurisdiction in the matter, and at this writing it is still in his hands. The bill providing for the inspection of all cattle entering the State was defeated on the floor of the Senate. The supply bill does not contain an appropriation for the work of the tuberculosis committee of the State Board of Health; last year this committee received \$10,000.

A compromise dispensary bill was passed and signed; this does away with a bone of contention among medical men which has been the cause of many bitter fights. Coroners' juries were abolished in all counties of the State except those containing cities of the first class (New York, Kings and Erie). The "short-hour drug clerk" bill is still in the hands of the Governor, with the chances in favor of his signing it. The bill which prohibited the Health Board of Greater New York to place its extra lymph and anti-toxine on the market was defeated on the floor of the Assembly. A medical-expert bill was presented, but was not heard of after reaching its committee; its promoters were totally inactive. No measure for the control of the practice of midwifery was introduced; the State Medical Society preferring to wait for a more opportune time to handle this delicate and complicated subject.

Late in the session a bill limiting the hours of work for nurses in training was presented, but died in committee. This, with many other bills which died in committee, will probably come up again next year.

The Army Surgeon's Bill.—The full text of this measure was given in the May ANNALS, and, in a word, exempts any surgeon who served as a commissioned officer in a New York regiment in the Spanish-American war from the provisions of the public health laws relating to examinations by the State Board of Medical Examiners. At a hearing before the Governor, May 10th, no one appeared in favor of the bill; the opposition, however, was well represented, but as the Governor said that he was opposed to the measure, its argument was not given.

The chief ground for opposition was that, though introduced in the interests of two or three men, it was general in application, and would create a break in the laws, passed after prolonged

efforts, establishing a high standard of medical education in the State.

The New York State Medical Society was represented by its President, Dr. Macdonald; Drs. Vander Veer, Ward, Curtis, Van Fleet and Root; the State Homœopathic Medical Society by its President, Dr. Sheldon, and Drs. Jones, Gorham and Paine; the State Board of Medical Examiners by Dr. George A. Fowler and Dr. Suiter; the Medical League of New York by Dr. Sturges, and the Albany County Medical Society by Dr. Neuman and Dr. Pearse.

In Memoriam

SARAH J. FINCH, M. D.

Dr. Sarah J. Finch died at her residence in Fort Ann, May 6, 1899, after a lingering illness. She was born in Kingsbury on April 22, 1838. She graduated from the Woman's Medical College in Chicago in 1873, spent one year in Leavenworth, Kansas, and then located in Fort Ann. She had a large practice in the villages of Glens Falls, Sandy Hill, Fort Edward and Whitehall. Dr. Finch has always been interested in the Albany Hospital, and became a liberal subscriber to the building fund for the new plant, shortly after the list was opened. She was a good woman, a credit to her profession, and leaves a large circle of patients, friends and acquaintances by whom she will be sorely missed.

WILLARD G. DAVIS, M. D.

Willard G. Davis, M. D., of the Class of 1841, Albany Medical College, died at Dunnsville, N. Y., May 16, 1899.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY COUNTY MEDICAL SOCIETY.—The last regular meeting of the Medical Society of the County of Albany was held in Alumni Hall, April 18. In the absence of both the President and Vice-President, Dr. G. S. Munson presided. The reading of the minutes was dispensed with. The first paper of the evening was read by Dr. E. Moore,

M. R. C. V. S., on "Bovine Tuberculosis in Its Relation to Man." Dr. Neuman then gave a synopsis of his paper on "An Analysis of the Gastric Symptoms of Pulmonary Tuberculosis." Dr. Lipes' paper on "Dermatitis Gangrænosa Infantum," owing to the lateness of the hour, was read, on his motion, by title.

ANNUAL MEETING.—Alumni Hall was well filled by the members of the society on Tuesday evening, May 9, at the annual meeting of the society. President J. L. Archambault presided. After the usual routine business was transacted, Dr. A. G. Root called the attention of the society to the Redington bill (Assembly bill No. 658), and suggested that the society take some action against the bill. Drs. Vander Veer, Ward and Neuman were appointed a committee to appear before the Governor on the following day in opposition to the signing of the bill.

President Archambault then gave the annual address, choosing for his subject: "Remarks on Retro-pharyngeal Abscess and Pulsating Empyema, with Report of Cases."

Officers for the ensuing year were elected as follows: President, Dr. Theodore F. C. Van Allen; Vice-President, Dr. J. W. Wiltse; Secretary, Dr. H. S. Pearse; Treasurer, Dr. W. H. George; Board of Censors, Drs. O. D. Ball, J. D. Featherstonhaugh, J. L. Archambault, W. O. Stillman and Martin MacHarg.

Drs. Leo H. Neuman, William H. Happel, George S. Munson and J. H. Mitchell were elected delegates to the State Medical Society.

On motion of the retiring Treasurer, Dr. Happel, \$50 was appropriated for repairing the interior of Alumni Hall.

GERMAN SURGICAL CONGRESS.—Professor von Bergmann, the Director of the Surgical Clinic of the University of Berlin, has been elected President of the next German Surgical Congress, which will be held at Berlin during Easter week, 1900. He has succeeded Professor Hahn, also of Berlin.

THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.—At a recent meeting of the Executive Committee the following officers of the congress were elected: President, Dr. H. P. Bowditch, of Boston; Secretary, Dr. W. H. Carmalt, of New Haven; Treasurer, Dr. Newton M. Shaffer, of New York; Chairman of the Executive Committee, Dr. Landon Carter Gray, of New York; Secretary of the Executive Committee, Dr. W. K. Simpson, of New York.

The next congress will meet in Washington, in May, 1900.

THE UNITED STATES MARINE HOSPITAL SERVICE.—By order of President McKinley, Fort Stanton, an abandoned military reservation in New Mexico, containing about 10,240 acres of land with the buildings thereon, has been transferred to the Marine Hospital Service for the care and treatment of cases of tuberculosis coming under its jurisdiction. Preparations will be immediately made for its occupancy by the service, and the buildings will be put in order for the reception of patients.

ASSOCIATION OF THE ALUMNI OF THE ALBANY
MEDICAL COLLEGE — TWENTY-SIXTH ANNUAL
MEETING.

The twenty-sixth annual meeting of the Association of the Alumni of the Albany Medical College was held in the Alumni Hall on Wednesday, April 19, 1899. The usual informal reception was held in the college library, where photographs were exhibited and greetings exchanged, between the hours of 9 and 10:30 A. M. Provision for the reunion of the decennial classes had been made by the assignment of the various rooms of the college for the separate classes, and before the general meeting the Classes of '69, '79 and '89 met for the reports of the class historians and for renewal of college acquaintance in the chemical lecture room and recitation rooms A and B, respectively. The annual meeting was called to order by the President, Dr. Willis G. Tucker ('70), of Albany, at half past ten o'clock.

The following members of the Association, with invited guests, students of the college and others interested were present: H. D. Didama, ('46); H. B. Maben, ('57); H. Bendell, A. Vander Veer, ('62); A. B. Husted, ('63); L. Hale, ('68); D. C. Case, W. G. Tucker, ('70); G. L. Ullman, ('71); D. H. Cook, H. G. Mereness, ('74); E. T. Rulison, ('75); J. F. Barker, ('77); J. H. Cotter, G. P. K. Pomeroy, W. O. Stillman, ('78); E. A. Bartlett, W. C. Crombie, O. F. Kinloch, W. E. Lothridge, W. J. Nellis, P. L. Suits, T. B. Van Alstyne, Sheldon Voorhees, ('79); C. B. Herrick, G. S. Munson, M. H. Strobe, ('80); J. H. Mitchell, E. E. Rulison, ('81); G. H. Houghton, A. Y. Myers, F. A. Palmer, W. B. Sabin, W. W. Scofield, ('82); H. L. Odell, ('83); L. B. Rulison, M. A. Wheeler, ('84); E. E. Larkin, M. MacHarg, R. A. McDougall, E. H. Rider, ('85); E. E. Finch, J. S. Parent, ('86); W. G. Macdonald, A. MacFarlane, C. H. Moore, ('87); J. Archibold, ('88); A. H. Bayard, H. F. Bonesteel, C. G. Briggs, C. E. Greenman, J. M. Mosher, W. G. Murphy, A. T. Powell, W. R. Seeber, M. R. Smith, F. S. Snow, W. Van Doren, M. J. Zeh, ('89); F. Crounse, W. H. Happel, G. T. Moston, A. G. Root, E. S. Simpkins, ('90); S. Le Fevre, J. W. Wiltse, ('91); A. C. Cobb, W. I. Goewey, R. A. Heenan, W. P. Kelly, W. G. Lewi, L. H. Neuman, H. S. Pearse, ('92); G. H. Janes, E. M. Leach, J. F. Reilly, G. H. Van Gaasbeek, J. S. Wade, ('93); E. H. Goodfellow, W. S. Hale, J. R. McElroy, R. Sheldon, ('94); E. N. K. Mears, ('95); F. D. Clark,

E Holley, G. V. Johnson, ('96); I. Applebee, J. J. Beard, H. J. Lipes, A. M. Ottman, W. E. Silcocks, C. N. Van Denberge, ('97); A. L. Newton, C. S. Prest, W. L. Wilson, ('98); J. M. Adey, G. E. Beilby, F. D. Branch, C. R. Conklin, F. A. Deal, C. G. Hacker, E. L. Hanes, W. G. Healey, E. E. Hinman, R. E. Kinloch, J. A. Lanahan, B. W. Mather, F. A. Smart, E. R. Stillman, M. E. Van Aernem, W. F. Wansbury, W. A. Wardner, H. J. White, ('99); F. C. Curtis, S. B. Ward, (Hon.).

The President introduced Professor Frederic C. Curtis, M. D., who delivered the following address of welcome to the alumni on behalf of the college faculty:

ADDRESS OF WELCOME.

Mr. President and Members of the Alumni Association:

It is a matter for congratulation that these recollections and associations with the Medical College are such that so many of you find this occasion sufficiently alluring to call you together here. Happy is the institution which is equipped with pleasant memories, in the minds of its graduated alumni. I fancy that it would be difficult to put a higher aim than that before an institution of learning of whatever sort; and no less for a medical school than for any. It involves the whole range of faithful performance on the part of those in its charge. It means that conscientious work is done by men who inspire respect and confidence. I know that very much of the pleasure of early life in school and college comes from the companions and friendships made with fellow students. This Association has done much to foster that. The decennial reports of classes made by your class historians keep this up. I should like to feel, however, that not a little of the charm, with which I trust the years which you spent together here is invested, comes from an honestly laid foundation of medical training which the college gave you, and not a little, also, from pleasant personal acquaintance with the individual members of the faculty. I am sure that the faculty have always been interested in the personal prosperity of the members of the College Alumni, and have taken pride in the accomplishments by which they have brought credit to the college, of which we have very distinct evidence.

These annual, periodic gatherings mark off like mile stones the progress of our profession in its attainments. Of course, our student life does not end with our college life, but if it were otherwise, and if this were a gathering of men each fitted with a supply of technical knowledge which abruptly ended with his graduation day, how extraordinary would be such a meeting as this. There are men among this body who under such conditions would represent a medical education of a good many years now past. This gathering would be an exceedingly interesting and entertaining one if made up of representatives of successive years of progress in medical knowledge. It would almost date from the birth

of pathology, a word that was obscure fifty years ago, down past the development of the X-ray. Medicine in all departments has been rewritten within that time. In many directions it has been rewritten within the easy memory of not a few of us. It might be truly said that even an annual meeting would bring a considerable contribution to it, if a record of the year's attainments were made. And so each would be one in a series of steps lifting a little upward. Probably some of your number come here this year, as at other commencement anniversaries, for the first time in a considerable number of years. We know that you have not failed to keep abreast of the advancing wave of accumulating knowledge in the profession. It is not possible for a man, in this active, progressive age, when all information so easily diffuses itself that no hamlet is so remote that it is beyond the reach of its range, and the world is so knit in one that all parts of it are in touch, to be left very far in the rear, or to be outside the influence of the vital spirit of the time. There is probably no profession, moreover, that is more in touch with the progressive, investigating, enterprising atmosphere, or lives in it more eagerly than our own, nor one which is better equipped with the purpose and the media for giving out to all the discoveries of each. So it would be an anomalous thing for any one in it to fail to imbibe and appropriate to some degree what is practical for his work and enlarging to his mind. It would be impossible to conceive of the Alumni coming back here bringing each only what he took away, or for this gathering to make up such a curious assemblage as it would be if that were the case. The very seeds of knowledge would grow by thought and experience, even if no new ones were dropped. Medical men continue to be students after their college life ends more than any other class of men.

So we expect to find you coming back to the college as able critics of the work you find the college doing. The question comes very naturally to you whether the college is continuing itself abreast of the growing spirit and the demands of the time. Certainly, if you should discover that it was not keeping pace, you would feel that it is not worthy of the past record, which is both old and honorable, and that your diploma from it is worth less than the estimate you have put upon it.

There is no question but that an Albany Medical College diploma has always had a conspicuous value, dated from whatever period of its history; and the alumni have, as a class, upheld its character. And I have every reason to assure you that the present faculty, not a few of whom have now for a not inconsiderable period of years been identified with it, and most of whom you personally know, have an earnest interest that every class going out of it shall carry away an equipment that shall be in keeping with the attainments of to-day, and made up of men who will continue to maintain the honor of the institution, which must be in their hands. You will find the college provided with better means for doing its work, in its hospitals and other media for clinical teaching, in its methods, in the trained force of workers, in the laboratories at its command, and in its entire faculty who, like yourselves, must be busy students

each of his own field — better than in the past, because the range of knowledge of the science is wider to-day than it was yesterday, and because the facilities and methods of teaching are larger and fuller.

We desire to welcome you back to-day to the college and to college reminiscences and college associates, hoping that you may find it pleasant and profitable to yourselves and to us for this short time to step out of the shadow of human suffering and trouble, in which much of the time you must walk, into the atmosphere of school life and companionship. We wish to express the hope that amid the exactions of a not easy profession you are yet finding your life in it full of reward and satisfaction; and, to bespeak for the old college a continuance of your good interest and help, which it will always prize most highly.

On motion of Dr. W. O. Stillman, the thanks of the Association were tendered Dr. Curtis for his interesting address.

On motion of Dr. J. H. Mitchell, the reading of the minutes of the last annual meeting was dispensed with, and the minutes as printed were adopted..

Dr. A. B. Husted moved that the President appoint a committee of five to nominate officers for the ensuing year. Carried. The President appointed as such committee: Drs. A. B. Husted, ('63); H. Bendell, ('62); E. A. Bartlett, ('79); W. W. Scofield, ('82), and L. B. Rulison, ('84). The committee retired.

The report of the Executive Committee and Recording Secretary was presented. It stated that two meetings had been held during the year. At the meeting held May 10, 1898, the Recording Secretary presented the records of the last annual meeting of the Association, including an account of the commencement exercises, and it was ordered that this be printed in the ALBANY MEDICAL ANNALS, and that fifteen hundred reprints be purchased by the Association and distributed in the usual way. The President, Dr. Tucker, introduced a discussion on the method of the Association in electing officers, believing that some change might be a benefit to the Association, and a committee, consisting of the Recording Secretary and Drs. Root and Lewi, was appointed to consider the advisability of adopting a new method of elections. The President also urged the necessity of an improved plan of carrying on the class reunions, and a committee, consisting of Drs. Pearse, Nellis, Mosher, Babcock and Bendell, was appointed to present a report upon this subject. The vacancy in the Executive Committee caused by the election of Dr. MacFarlane as Corresponding Secretary of the Association was then filled by the election of Dr. C. Harper Richardson. The

Treasurer reported that the college building fund had received a donation of \$24 from the Albert Vander Veer Medical Society. At the meeting held February 8, 1899, the distribution of the proceedings of the last annual meeting of the Association was announced. A copy had been sent to each alumnus whose address was known, together with a college catalogue and treasurer's blank. The committee appointed to consider a new method of electing officers submitted the following report:

It is recommended that the Executive Committee appoint a sub-committee of five members to make nominations for the various offices of the Association, selecting as many candidates for each office as seems advisable; that these nominations be printed upon a so-called blanket ballot, which shall contain also a space for the insertion of other names than those selected, for the convenience of the voter; that the ballots be printed and distributed by the Corresponding Secretary with the announcements for the annual meeting, with arrangements for the transmission and receipt of the ballots by mail, and that the committee to be appointed in conformity with this recommendation be given power by the Executive Committee to arrange for the details of this method of balloting and election so that it may correspond with the provisions of the Constitution of the Association.

The report was received, generally discussed, and a motion for its adoption was lost. The following committees were appointed by the President: On Class Reunions: Drs. MacFarlane, Bendell and Richardson. On Alumni Dinner: The President, Drs. Vander Veer and Nellis. On Entertainment of Visiting Alumni: Dr. MacFarlane, The President and Dr. Van Allen. Reception Committee: Drs. Babcock, Mereness, Cook, Sabin, Root, Lewi, Washburne and Happel.

The Treasurer, Dr. Van Allen, reported that the law suit against the Association had terminated favorably to the Association.

On motion, the faculty of the college were invited to participate in the exercises of Alumni Day and to appoint some representative to deliver an address of welcome to the Alumni at the opening of the annual meeting. The Corresponding Secretary was authorized to have the usual notices announcing the annual meeting printed and to issue the same.

On motion of Dr. C. S. Merrill, the report was adopted and ordered entered upon the minutes.

The Treasurer, Dr. T. F. C. Van Allen, presented his report for the year, as follows:

TREASURER'S REPORT.

Cr.

Balance on hand April 20th, 1898.....	\$179 67
Received as dues April 20th, 1898.....	103 00
Dues received between April 20th, 1898, and April 19th, 1899..	22 00
Interest on money in bank to January 1st, 1899.....	5 89
	\$310 56

Dr.

Various bills paid from April 20th, 1898, to April 19th, 1899, for which vouchers are presented.....	155 88
Balance	\$154 68

THE COLLEGE BUILDING FUND.

At last report this fund amounted to \$51.33. On April 30th, Dr. Edgar Vander Veer contributed \$20.50, this money being in the treasury of the suspended Albert Vander Veer Medical Society of the College. This made the fund \$71.83. I have not had the interest computed this year.

(Signed.) T. F. C. VAN ALLEN,
Treasurer.

On motion, the report of the Treasurer was referred to a committee consisting of Drs. H. J. Lipes, F. S. Snow and E. E. Larkin, who examined the same, compared the disbursements with the accompanying vouchers, and subsequently reported it correct. On motion, the report of the committee was received and the committee discharged, and the report of the Treasurer accepted and ordered placed on file.

The President's address being the next order of business, ex-President Maben was called to the chair, and President Tucker delivered the following address:

PRESIDENT TUCKER'S ADDRESS.

Fellow Alumni:

This is our twenty-sixth annual meeting, but we are really celebrating the close of the first quarter of a century in the history of our Association, for it was organized on the 20th of January, 1874, and incorporated upon the sixth of February succeeding. Twenty-five years in the history of a society, or an institution, or as a part of a man's life, no matter how prolonged that life may be, is a long, and generally an eventful period. Within this quarter century many of those who were active in the organization of the Association, including seven of the ten members of the Executive Committee named in the certificate of incorporation, and all the five signers of this certificate, except myself, have passed away;

and within this period most of these young men who to-day receive their degree in medicine and become members of our Association have been born. I do not propose, however, to review this period, for while reminiscences may sometimes be interesting, they are not always profitable, and in this busy time we live mostly in the present, and it is well that it should be so. More may generally be gained by looking forward than by looking backward, but a word or two concerning the origin of our Association may not be out of place, nor fail to teach a lesson which, on this our silver anniversary, I should like to impress. The idea of organizing an Alumni Association in this college originated with the members of the graduating Class of 1874, and to Henry B. Whitehorne and S. Oscar Myers, of that class, chief credit should be given. They called a meeting of their class to consider the matter; perfected a plan of organization; made a list of alumni, and issued the call for the first meeting, and this meeting was entirely successful, and resulted in the formation of a permanent organization. A constitution was adopted, officers chosen, the first alumni dinner held, and the Association soon after incorporated and its successful career inaugurated. And the point that I would impress is this — that this Association, “organized to promote the interests of the Albany Medical College and to cultivate social intercourse among its alumni,” these being, in the words of its constitution, the objects for which it was created, and in both of which directions it has been more successful than could have been fairly anticipated, was first suggested and successfully organized by resident students of the college before graduation. Realizing, as I do, the value of such an organization as this of ours, the practical aid which it may render, and the possibilities of its influence in strengthening an institution and aiding in its upbuilding, I have thought it not only fair to the Class of '74 that this fact should be restated and emphasized, but have also felt that in calling attention to the fact others, whether students or alumni, might be encouraged to feel that their influence, rightly directed, might be equally great, and might be strengthened in the belief that the success of an educational institution largely depends upon the loyalty and devotion of its student body and alumni. I well remember that my old preceptor, a distinguished member of the faculty, at first regarded the organization of this Association with some doubt if not with disfavor. He was a representative of the one-man-power idea, and no man ever used his great influence more judiciously, beneficially and unselfishly than he. But he was fearful that such an organization might interfere, criticize or seek to dictate in the management of affairs, or be made an instrument, by designing men, for personal ends; and, although he died soon after, full of years and of honors, he lived long enough to see how groundless were his fears. The one man idea in educational institutions has passed away. No matter how great his influence nor how widely extended his fame, no institution can be catholic in its teachings, or broad and progressive in its policy, if dominated by a single personality.

And I am sure that I express the feeling both of trustees and of faculty when I say that this old school desires to live, not on past reputation and ancient history, but by virtue of present achievement, and that it seeks success only as it merits it, and counts no success real that is not the result of honest work honestly done. And so we look to our alumni for counsel as well as encouragement, and for criticism if merited, as well as support if we deserve it. And I am sure that all of us who have the best interests of this school at heart most earnestly wish that this Association might come into much closer touch with those who manage its affairs. Formed primarily to promote the interests of the college in the work of medical education, it is a question whether its secondary object, the cultivation of social intercourse among its alumni, has not been unduly emphasized. It is certainly to be desired that some more tangible good may eventually result from the action of a body so well organized as we now are, and having within it the potency which makes great achievements possible.

When our Association was organized in 1874, the total number of graduates was 1,189, and of this number the addresses of 479, or forty per cent., had been ascertained. The total number of graduates is now 2,269, and of those known to be living we have the addresses of 1,425, or about sixty-three per cent. We count all these members of our Association, and have always emphasized the fact that our Constitution and By-laws provide for no election to membership, and require the payment of no initiation fee; declaring all graduates in good standing in the profession, or engaged in other honorable occupations, to be members of the Association, and while our by-laws provide for the payment of a small fee as annual dues, this provision has never been considered as creating an indebtedness, and the Treasurer has never kept any account of unpaid dues. Every graduate of the college has been notified of every meeting, and has received all printed matter issued by the Association, if his address was known, and has been welcomed to all meetings and entitled to all privileges without regard to his standing on the Treasurer's books, and this has, I think, been a wise policy, for our expenses have been small and easily met by the voluntary contributions of those who have chosen to pay the prescribed dues from time to time, as they have felt disposed so to do. In such an Association we want no unnecessary restrictions, nor troublesome complications and red tape, but that every graduate should feel, from the day of his graduation, that his aid and influence are wanted, and that he has a right to be here, and ought to be here. Holding, as we do at present, but one general meeting each year, and this upon Commencement Day, our time has always been limited, and this has resulted in some confusion and the rather hasty transaction of business. How this condition might be bettered has been discussed at almost every meeting of the Executive Committee, and it has long seemed desirable that some plan might be put into operation by which the classes whose historians make their decennial reports might have an opportunity to get together and listen to the reading of their historian's report, and have an

opportunity to discuss it. These reports, which are of great interest to the members of particular classes, are of less interest to others, and, as some are long, and four or five are due at every meeting, it seems unadvisable to have them presented *in extenso* at the general meeting, and, although subsequently published in full in our proceedings and sent to all members, it hardly seems courteous to the writers merely to read them by title. At a recent meeting of our Executive Committee this matter was referred to a special committee, and it is hoped that the plan that has been devised may prove a practical and successful solution of the difficulty, and that these interesting reports may hereafter receive the consideration to which they are entitled.

Another matter which has received much attention, and at many times, from the Executive Committee, is the method of election of our officers. This may not be felt to be a very important matter, since some rather arduous duties attach to some of the officers, and no compensation goes with them, save such satisfaction as may come from the sense of duty performed, but it may be thought that some distinction attaches to them, and certainly those selected should as fairly as possible represent the choice of those members of the Association who are present at the annual meeting, or are interested in its affairs. The constitution simply provides that officers shall be elected by ballot at the annual meeting, and, while many plans have been suggested, no better method seemingly has yet been found than that which has prevailed for many years past. This has been for the President, on motion early in the meeting, to appoint a committee of five from those present to act as a nominating committee. This committee retires, and having at hand a list of all officers to be elected, with lists of all who have held office in the past, and list of those in attendance at the meeting, makes up a ticket, and presents it as a report. Its adoption is generally moved, and some person directed to cast a ballot on behalf of the Association for those named in the report, and they are then declared elected by the presiding officer. Of course, such a method as this is not the best conceivable, and it may be said that everything is cut and dried in advance; that nomination is equivalent to election, since but one ticket is in the field, and that individual members have no voice. A special committee of the Executive Committee, appointed for the purpose last spring, reported at our last meeting a plan which proposed that a blanket ballot with two or more nominations for each vacancy be sent by mail in advance of the meeting to each member, who shall be asked to indicate his preference, or fill in any name he chose, and either return the ballot by mail, or vote it in person at the meeting. I am inclined to think that this plan might have been tried with advantage; but the majority of the committee felt otherwise, and no action was taken. Of course, our election might be held by calling for nominations, and taking a separate ballot in each instance, but such a course would consume most of the time at our meetings, and it is certainly a question whether off-hand nominations thus made would result in a more judicious selection than the more deliberate

method now in vogue. Some years ago it was proposed that the Executive Committee act as a nominating committee, but this plan did not meet with favor, since it is open to the objection that it practically places permanent control in the hands of this committee, and might make it a close corporation. I think I can speak for the present officers of the Association in saying that they are earnestly desirous of fulfilling the wishes of the alumni in this, as in all other matters, and are anxious to be instructed by them.

The year just closed has been a successful one for the college. Our attendance has been smaller but this was by no means unexpected. Two years ago, and one year in advance of the legal requirement, we inaugurated our four-year course, and since other schools in many cases admitted students to a three-year course, our more stringent requirement resulted in a smaller entering class in '97. And this last year the entrance requirement, raised by law from twenty-four to forty-eight academic counts, and compulsory attendance upon four courses now required by law of all who would practice medicine in this State, have also had the effect of reducing the size of our entering class. This was to be anticipated and most of the schools have had a similar experience, and it is also to be remembered that our entering classes in '95 and '96 were unduly swelled by those who, knowing that these increased requirements were going into effect, made haste to enter the medical schools in order to escape them. Believing as we do that our course is not only longer, but that it is more thorough and better than ever before, we feel no concern at this falling off, which we believe to be temporary, and we look for a larger entering class next fall and in succeeding years. There are some who think that we have had too much medical legislation, and when it is considered that our laws now prescribe both the entrance and graduation requirements, and in addition require an examination before a State board after graduation in order to obtain a license to practice, such might seem to be the case. For myself I am not at all sure that the present entrance requirements secure the best preliminary training for medical students, and I believe that many men well fitted to take up the study of medicine are prevented from so doing through inability to make up the requisite number of counts, and I am sure that the medical colleges of this State lose many students from other states who, having no intention of practicing in this State, would be glad to obtain their education in our schools. I am distinctly of opinion that the colleges should be allowed to receive such students and graduate them, and, since a diploma no longer constitutes a license to practice in this State, this would be not only equitable, but from every point of view entirely right and proper. Such graduates could practice in states in which no such entrance requirement exists, but could not compete in this State with those who have complied with our preliminary examination law. And in so holding I am influenced by no personal or selfish considerations, because the number of such students that we lose is small, but I believe that the educational

advantages offered in this State are in many respects unsurpassed and that we should not without good reason turn away those who seek those advantages and come from all parts of the country to secure them. There has been so much talk about higher standards during the past few years that I have hesitated to seem to criticise unfavorably our existing laws in any respect lest my motive be misunderstood, but I can see no good reason why I should be silent in a case like this, nor regard the criticism of those who, through indifference or otherwise, are unwilling to look into the matter. To state it in concrete form, a student from Massachusetts, Connecticut or Michigan who desires to pursue his medical studies in this State cannot be graduated from any of its colleges, no matter how competent he may prove himself to be, if lacking any of the preliminary academic counts required by our present law, and this although his intention may be to practice in his native State, and despite the fact that another law in this State prohibits him from practicing here even should he desire to do so. And my contention is that this is too great a restriction; is entirely unnecessary, since a discrimination in such cases might easily and should properly be made, and that its tendency is to injure the schools, and keep people from the State who ought to be welcomed to the advantages which its institutions afford, and of which we profess to be so proud. With those who, either on the trades-union principle, through overabundance of zeal, or other motive, take the ground that every possible obstacle should be put in the path of any young man seeking to obtain a medical education, and who apparently regard a disposition so to do as *prima facie* evidence of some criminal intent, I have no argument.

Another subject upon which room for honest difference of opinion certainly exists is the necessity for a compulsory four-year course. For myself I think this a matter which might well have been left to the colleges, and believe that it is as irrational to assert that four medical courses are essential to every student as it would be to aver that forty courses could make a physician of some students. With a high school course occupying a man's time until he is eighteen or more, and a college course of four years, and a professional course of four more years, and two or three years of hospital experience or foreign study, a man can scarcely enter upon the practice of his profession under thirty years of age, and this is too late for a man's real life work to begin. In the case of those universities the academic and professional departments of which are in the same town, a year may be saved by a virtual shortening of the college course, and in several instances this is being done, but it is not always practicable. The pros and cons on this subjects have been so often discussed that I do not purpose occupying your time with further statements or arguments, but I think that you can scarcely have failed to have noticed of late that there has been something of a reaction from the old idea, and that a compulsory four-year course in medicine is no longer regarded by all who have looked fully into the matter as an entirely unmixed good. For myself I am

fully of the opinion that men well prepared to begin medical study may be taught all that they can fairly be expected to know at time of graduation in three properly graded sessions of seven or eight months each, and that too much time is spent at both ends of the course in teaching in medical schools subjects which should be taught elsewhere. Elementary physics and chemistry and the allied sciences should have been mastered before the medical school is entered, and the medical schools should not be expected to teach what we call the specialties in any exhaustive way, for these are proper subjects of post-graduate study.

The Albany Medical College is a small college and in these days of great combinations of capital in business affairs, when everything, even in educational matters, is done on a large scale, and great endowments of medical schools are not uncommon, some have feared that the smaller schools would be crowded out, being unable to hold their own in competition with the larger institutions. But I do not think that such need necessarily be the case. There is much to be said in favor of the smaller colleges, if they are good colleges, progressive in their methods and liberal in their policy. In them the student is brought into close contact with his instructors, and he feels that they have an interest in him, and that his individuality is not lost in a great throng, and this feeling, that he is personally known, adds to his sense of responsibility and stimulates him to put forth his best efforts. But I do not care to discuss this question to-day, and would add only this, that in the struggle for existence it is the weaker, not necessarily the smaller, that go to the wall, and the friends and alumni of no school that is doing good work need fear for its future. Not every one in the community will believe that the advantages all lie with the larger institutions, and the smaller schools, if they are well administered, are sure to receive their share of support. And assuredly none other than their own alumni should better know their condition, nor, if worthy of support, should other than their own graduates be prompter to accord it. And so we are glad to report to you that the outlook for our school is bright. We recognize some shortcomings and many needs, but these will be remedied or supplied in time, and they do not discourage us. Especially we need a new, well-appointed and commodious building, and now that our new Albany Hospital is almost ready for occupancy it may not be an inappropriate time to refer to the needs of the college. That we ought to have a new building all are agreed, but just where the funds to build it are to come from is not so clear, and as to its location different views are held. For myself I am inclined to think that our present site is a good one, and that for several generations it will be near to the center of population, and therefore more convenient for instructors and students than a location on the outskirts of the town, which, however desirable for a hospital, has not so much to recommend it for a college like ours. Hospitals and dispensaries must always be maintained in the central parts of a city and the distance from the Albany Hospital is no greater than that which separates many colleges from institutions

where clinics are held and other instruction given in many cities at home and abroad. But the question of location is not the first to be considered and need not be discussed until we see a way opened by which a new building may be provided. This way is not clear as yet, but when the time comes that we are justified in definitely inaugurating this movement for a new building I feel sure that the friends of the college may appeal to its alumni for encouragement and support with a confidence that time will show has been well placed.

The new Albany Hospital to which reference has been made and concerning which you are all informed, will be formally opened for occupancy, with appropriate exercises, in the early fall, and it is hoped that our members from out of town will find time, before leaving the city, to visit it and see for themselves how grand an institution has been planned, and successfully provided, through the intelligent and public-spirited activity of its board of governors and staff, and the liberality of the citizens of Albany. It is a hospital of which any city might well be proud, and, with half a century of beneficent work behind it, this old institution starts most auspiciously upon another period of useful existence. The hospitals of Albany are numerous and efficiently administered, and they, and our Bender Laboratory, furnish to this college those facilities which, if not so extensive, are yet of a kind which place it upon the same plane as that occupied by the largest institutions. Nor, in this connection, should I omit to mention the training school for nurses which, established a few years since, is now in very successful operation and is to be well provided for in the new hospital. The pupils in this school have rendered most efficient service in the hospital, and in the community, and the school is highly creditable to the city and adds materially to its reputation as a medical and educational center.

During the past year our Association has lost by death the following members: Edwards Hall, '44, New York city; Robert Loughran, '57, Kingston, N. Y.; Porteous C. Gilbert, '63, and Charles S. Grant, '66, of Saratoga Springs; Xyris T. Bates, '67, Poughkeepsie; William Morgan, '69, Albany; Charles McCullough, '77, Gloversville; Uriah B. La Moure, '78, Albany; Sanford J. Engle, '79, Susquehanna, Pa.; Evart P. Van Epps, '81, Schenectady; Alfred L. Browne, '86, Cornwall-on-Hudson, and Stephen H. Webster, '86, Troy. Dr. Hall, who died on the 10th of December last, was in his eighty-first year and one of our oldest graduates. He was actively interested in the college and a charter member of the Alumni Association of Greater New York, in which society he took great pride. I hope that a suitable biography of him, and of the other decedents whose names I have read, all of whom evinced a deep interest in their *alma mater* and in this Association, will be presented by the class historians of their respective classes for publication in our proceedings and preservation in our records.

In response to a demand which seemed to be quite general on the part of the alumni, our alumni dinner has been restored to its old place on our program. Three years ago it seemed that interest in this dinner

had fallen off and the Executive Committee decided that it would be wise to substitute something in its place for a year or two, but last year it was evident that the majority of our members desired it restored and so the committee has made preparations this year which, with a good attendance on the part of our members, will, it is hoped, result in a most successful dinner and most enjoyable evening.

Gentlemen of the Class of '99:

Although the diplomas attesting your graduation and conferring upon you the degree of Doctor of Medicine have not yet been delivered into your keeping, you are entitled to receive them and only await their public bestowal this afternoon. You are therefore, with us, members, by the declaration of our constitution, of this Association, and we welcome you to its membership, hoping that with the passing of the years your interest in it will increase and the affection you bear your *alma mater* will strengthen. You have chosen a noble profession, and you have devoted yourselves assiduously to the preparation so necessary on the part of those who would practice it honorably and successfully. That honorable and deserved success may attend your efforts is, I am sure, the earnest wish of those, our members, who now, with me, most cordially and most gladly welcome you as members of the Association of the Alumni of the Albany Medical College.

The members of the Class of '99 were present in a body, and rose as the President addressed them at the conclusion of his address, and received them into membership in the Association.

Dr. D. H. Cook moved a vote of thanks to the President for his interesting address, a copy of which he was requested to furnish for publication. Ex-President Maben put the motion to a vote, and declared it unanimously carried.

President Tucker then resumed the chair.

Dr. Harry Seymour Pearse then read the report of the Historian.

REPORT OF HISTORIAN, DR. HARRY SEYMOUR PEARSE.

Mr. President and Fellow Members of the Association:

The present year marks the sixtieth anniversary of the granting of the charter to the Albany Medical College by the Legislature. On January 3, 1839, the first course of lectures began; on February 16 the charter was received, and on April 24 of the same year the first commencement was held. During the sixty years, sixty-seven classes have been graduated and the degree of Doctor of Medicine given to 2,269 men. Of this number, as far as can be learned, 423 have died; the addresses of 1,442 are known and 404 cannot be traced. Records are on file of 217 who are known to have served in the civil war and thirteen in the Spanish-American war, and some of these are veterans of both wars.*

* See page 323.

Our institution has become venerable and proud, and enjoyed the reputation through all its years, of solidity of foundation and integrity of purpose. It has been its steadfast endeavor from the beginning, to give its students the advantages of the latest and best theories and practices of the sciences of medicine and surgery, and always succeeded; otherwise, existing as it has, in a period characterized by fierce competition and rapid advance, it would have become decrepit and feeble in its advancing years. On the contrary it has yearly grown stronger and more energetic. It now takes pride in its still youthful off-spring, this the association of its graduates, which has just reached the quarter-century mark.

I have the honor to present the histories of the Classes of '39 and '49. The history of the Class of '59 is presented by Dr. Mahlon Felter, of Troy; of '69, by Dr. William H. Murray, of Albany; of '79, by Dr. Sheldon Voorhees, of Auburn, and '89, by Dr. Andrew H. Bayard, of Cornwall-on-Hudson.

The Class of '39 consisted of thirteen (13) members, three (3) of whom are known to have died; eight (8) have been lost track of for years, and two (2) are still living, Dr. William H. Snyder, of Troy, N. Y., who is now in his eighty-fifth year, and Dr. Rial Strickland, of Enfield, Conn., in his eighty-sixth year. Both were unable to attend this meeting because of physical infirmity, though they had planned to come together. Dr. Strickland writes the following letter:

ENFIELD, April 14, 1899.

DEAR DOCTOR PEARSE.—Thanks for your kind invitation to be present at the sixtieth anniversary of my graduation. As the years roll on, I think more and more of my *alma mater*, and of its graduates. In my younger professional life I was absorbed in its duties. Now, in my thoughts, I live principally in the past. I continued to attend more or less calls until last autumn, when I practically gave up business. I am now in my eighty-sixth year, and have led a busy life. My health is good. I enjoy reading, and when I tire of it, others entertain me in that way, so I keep informed of the doings of this busy world.

It would give me great pleasure to meet with the Alumni Association, but the weather is so changeable, I have not the courage. With many wishes for the continued prosperity of my dear old *alma mater*, and best wishes for the health and prosperity of all its graduates, I am,

Sincerely yours,

RIAL STRICKLAND,

Class '39.

Dr. Phineas H. Strong of this class and the President of this Association in 1877, died in 1890, at the age of seventy-three. This is the only death among its members during the last decade.

The Class of '49 has not been so fortunate; though it contained twenty-six (26) members, there is but one known to be living at the present time — Dr. Stephen C. Johnson, of Luzerne, N. Y. Fifteen (15)

are known to have died, of the remaining ten (10) there is no record. During the last decade the class has lost its Historian, Dr. William C. Wey, of Elmira, who read the report of his class in 1889, and whom many here will remember as the President of the Association in 1890, Dr. Arlington Boyce, Dr. William Fitch and Dr. S. M. Smith.

Dr. Murray presented the following report, as Historian of the Class of '69:

REPORT OF THE CLASS OF '69 — DR. WILLIAM H. MURRAY.

Mr. President:

In answering for the Class of '69, I would say I have written to all my classmates whose addresses I knew. We had twenty-eight in class. Ten are known to be dead, and two we have no knowledge of, whether alive or dead. I have letters from five: Dr. Schureman, of Tom's River, N. J.; Dr. Hewitt, of Saratoga; Dr. Solon Briggs, of Pasadena, Cal.; Dr. Davidson, of South Bethlehem, Albany county; and Dr. John Ward, of Ellenville, Ulster county. All of these seem to be doing well and claim they have never disgraced their *alma mater*. The dead are Drs. Zeh, Wands, Shurtleff, Sturdevant, Bosworth, Jacob Briggs, De Zouche, Griffin, Longendyke and Morgan. We have no address of Drs. Lawton, Ebell and Metcalf.

CLASS OF '69, A. M. C.—COMMENCEMENT, DEC. 23RD, 1869.

Bosworth, George G., Truxton, N. Y., died January 16, 1873.

Briggs, Jacob Myers, Los Angeles, Cal., died January 24, 1875.

Briggs, Solon, Room 16, No. 177 Broadway, New York city.

Carpenter, Edward A., No. 7 Linneau street, Cambridge, Mass.

Davidson, J. Reid, South Bethlehem, Albany Co., N. Y.

Deyoe, George A., Westkill, Greene Co., N. Y.

De Zouche, Isaac, Gloversville, N. Y., died February 22, 1895, age 72 (first Historian).

Ebell, Adrian J.

Fennelly, Paul E., Watervliet, N. Y.

Griffin, James M., Brooklyn, N. Y., died March, 1893.

Hewitt, Adelbert, Saratoga Springs, N. Y.

Hunt, Robert M., Uwada City, Cal.

Lawton, David A.

Longendyke, Revillo T., died.

Metcalf, Carl G.

Morgan, William, 25 Lake avenue, Albany, N. Y., died.

Murray, William H., 269 Lark street, Albany, N. Y. (Historian).

Paul, George E., Rutland, Vt.

Reid, Henry G., Westernville, Oneida Co., N. Y.

Schureman, Irving C., Tom's River, Ocean Co., N. J.

Shurtleff, Herbert, died April, 1882.

Smithwick, John, Sharon, Norfolk Co., Mass.

Struble, James H., Jr., Hawley, Wayne Co., Pa.

Sturdevant, Frank, died.

Van Slyke, Andrew Webster, Coxsackie, Rensselaer Co., N. Y.

Wands, Alfred L., died.

Ward, John J., Ellenville, Ulster Co., N. Y.

Zeh, Philip J., Gilboa, N. Y., died February, 1889.

Solon Briggs writes: "My personal history has been quite varied since my graduation in 1869. Soon afterwards I hung out my shingle in Newark, N. Y. In 1871 I married Josephine B. Shaw, of the faculty of the Albany State Normal School. Pursuing my profession with good success, I attended one year's lectures in 1874-'75 in Ann Arbor, Mich., where my wife graduated, and I also took another diploma. Returning to Newark we together resumed practice, and in 1879, from the necessity of providing accommodations for non-resident patients, we established a private hospital. Meantime I had been for some years United States examiner of invalid pensioners. The arduous duties of an active practice, coupled with cares of a large household, were too much for my wife's strength. After seeking vainly for a climate favorable to my wife's case we at last settled in New York, where conditions favorable to health seemed to prevail. Twelve students pursued the devious paths of medical study with me and are now all honorable members of the profession.

"In October, 1894, we came to this coast on an errand of mercy — to minister to a dearly beloved brother who lay at death's door with typhoid fever, and whose wife also was at death's door with phthisis. Happily my brother recovered, though his wife died. Spending fifteen months in southern California, with its equable and delightful climate, and abundance of all kinds of fruit the year round nearly, in January, 1896, we resumed our return journey via San Francisco, desiring to visit the Yosemite and other points of interest north of here.

"On April 4, 1896, at the hotel in San Francisco, my beloved wife was taken instantaneously and totally blind, without shock. Four specialists saw her several times each, but all pronounced it a case of embolism in the optic chiasm. A professional nurse was installed and for two years gave her attention. In February, 1897, on account of rheumatism, we returned to this delightful country, where we now live in our own house. I might add that my wife has not been able to distinguish between night and day for over three years and no hope is promised of her ever seeing again. She reads with her fingers to occupy her time somewhat. I am giving her a good part of my time, but cannot avoid some practice even if I would. I have eighteen kinds of fruit in my large garden and several varieties of some of the kinds. For the greatest amount of physical comfort and the greatest varieties of fruits and vegetables, being almost continuously harvested, this country takes the palm.

"Please accept for each and every member of the Class of '69 my distinguished regards. It must needs be that the 'survival of the fittest' is illustrated in your cases, as none other could have survived a

medical practice for *thirty years*. My health is excellent, although I was fifty-four the fifth of this month, and I weigh 196 pounds.

"May we all live to meet ten years hence, or if otherwise, may we find 'life more abundant' and immortality beyond the sighings and the tears."

J. R. Davidson writes: "After graduating in '69, I began practice in 1870 at Castleton, Rensselaer county. In 1878 I changed to Bethlehem, Albany county, and have been here in the same place since that time and have followed my profession."

Adelbert Hewitt writes: "I have been plodding in a commonplace way since graduation. Fourteen years were spent in Fort Edward, N. Y., and the remainder of the time in this town. It would be a pleasure to meet the members of the old class, and I shall try to do so."

I. C. Schureman writes: "After graduation in '69 I located at Farmingdale, N. J., and shortly afterward married. Within a year, at the invitation of my old preceptor, Dr. Wm. La Baw, a graduate of Albany, I took his practice at Navesink, N. J., now Atlantic Highlands. A year later the death of an old physician and the solicitation of friends brought me to Toms River and here I have been ever since, twenty-six or twenty-seven years. How old we are getting! I have nothing to boast about, but old Albany has not been disgraced by me. I have given honest, *gilt-edged* advice and have received small reward for the same. I have, however, always paid 100 cents on the dollar and have enough left for funeral expenses. Never having dabbled in the cesspool of politics, I have held no political office. For about twelve years I have been surgeon for the Pennsylvania Railroad. I was a charter member of our County Medical Society and for years was its secretary. Later, the nobs at that very nobby place, Lakewood, thought that they could do things better, and with enthusiastic cheerfulness gave up my burden. To-day it would take a microscope to find the society. Twelve years ago I had the misfortune to lose the wife of my youth. Two years ago I married again and happily. I recall yourself and a score of others whose names I could mention, and year after year I have been promising myself the pleasure of a visit to Albany at commencement, but there is always something in the way. Not until the Angel of Death taps him on the shoulder does the ordinary cross-roads country doctor have his day off. Should anyone from the Class of '69—or any other class—come this way, the latch-string is out and they are assured of a cordial welcome."

John J. Ward writes: "After graduating I returned to practice in this village, where I have been ever since and where I had practiced several years under the guidance of my friend, the late Hon. Jacob S. Freer, M. D., who, after leaving the Senate, became connected with the elevated road, New York city, and I was thrown on my own responsibility. Have done much hard work, although for the past five years have partially retired from active practice; yet consider myself in the harness. My object has been to bring sunshine by my presence, making it a part of my personality, trying to elevate the noble profession, not

sinking it to the low plane of getting all the money out of it by intrigue and the sacrificing of all the noble qualities of true manhood; making it a principle not to encourage superstition, buffoonery, or charlatanism, but all times endeavoring to be true to the dictates of conscience. I have been health officer fourteen years, examiner for ten leading life insurance companies, and am a member of the New York and the American Medical Associations. I would be glad to meet with you, to show my interest in the Association by my presence, also that you might see how hale, hearty and young in spirits a person may be after forty years of country practice."

Dr. Voorhees presented the following report, as Historian of the Class of '79:

REPORT OF THE CLASS OF '79 — DR. SHELDON VOORHEES.

Mr. President and Gentlemen of the Alumni:

After a period of twenty years I am very glad to come back and tell you about the Class of 1879. We went out from the college forty-three in number. To-day only thirty-seven remain to answer to the class roll-call, six having been called to that future life which we believe is to come after this. All began the practice of medicine and all except two of those who are living are practicing to-day. The two exceptions are at work in lines closely in sympathy with their professional training. All from being earnest, hard-working students have developed into practical, progressive physicians and citizens.

Perhaps no like period in the history of medicine and surgery has witnessed a greater advance in the healing art. We feel that it has been no slight privilege to be counted among those who have been permitted to practice medicine during this time.

As one of my class here to-day I want to say that I believe every one without exception has made an earnest effort to be an honor to his class, a worthy member of this Association, and a credit to the college which it represents. Twenty years ago when you admitted us to membership in this Association we took it quite as a matter of course and did not realize the full extent of the obligation under which you placed us. To-day, for myself and the class of which I am a member, I want so far as possible to express a feeling of the indebtedness which we are under to you, and through you to the Albany Medical College.

On graduation, the class contained forty-three members. Of these, six are now dead, Dr. J. T. Keay, Dr. Otto Ritzman, Dr. J. J. White, Dr. H. W. Lawrence, Dr. K. A. Bushnell and Dr. Sanford J. Engel. Letters have been received from twenty-eight of the remaining thirty-seven.

Dr. George M. Abbott writes from Castleton, N. Y., that himself and family, consisting of wife and one daughter twelve years old, are well and that he hopes to attend the next reunion and see many of his class.

Dr. Menzo Barkman writes from Binghamton, N. Y.: "Five years

ago I came to Binghamton, where I established a wholesale and retail drug business. Also practice medicine. I am pleased to state that I have prospered and am enjoying very good health. Have no family except my wife, who has been my faithful companion through shadow and sunshine for seventeen years. I would like to write you more, but have not the time. With kindest regards and with best wishes to all the members of the class."

Dr. E. E. Brown writes from Phelps, N. Y.: "I have recently removed to this place for a larger field. I still live, as I hope all the others do."

Dr. E. A. Bartlett writes from Albany, N. Y.: "Time has dealt very kindly, though very gently (financially) with me. If the days were longer, perhaps I could do more. It seems to me every one living in this age has reason to be thankful. So much activity along all lines of thought. So much history making, so much progress, especially in medicine and surgery."

Dr. C. S. Burnett writes from Summit, Schoharie Co., N. Y.: "Have a good practice, fair health, a wife and no babies."

Dr. W. C. Crombie was the essayist of the class. He writes from Mechanicsville, N. Y.: "Yours of the 28th of February found me cogitating upon the experiences of twenty years of practice since the Class of '79 left the hospitable doors of our *alma mater*. What changes these years have wrought in the personnel of our classmates, I do not know. Seldom do I meet any of those old faces I thought I should always remember. Most happy should I be could I meet each and every one at our second decennial reunion. As little as I know of their history for the past ten years, this I know, that some are forever beyond our knowledge. Somewhere, somehow, they passed beyond the shadows. May we revere their memory. I am glad these reunions come to us. I trust to meet many and hope you may inform us of many who may not be able to be present.

"Of myself, there is little to write that could in any way interest over and above the usual ordinary aspirations, successes and adversities of a general country practitioner. Locating in Schaghticoke, Rensselaer Co., N. Y., in 1879, I continued to practice there twelve years. In the spring of 1891, I attended a post-graduate course at the Polyclinic School in New York city, and while there, I acquired an attack of la grippe and had to discontinue my course and repair to the Adirondacks, where I remained until fall. From there, I went to Denver, Col., and remained a year.

"At Saranac Lake, I had some slight pulmonary hemorrhage and a microscopic examination showed the bacillus of tuberculosis, and I was, as you may guess, not very profoundly impressed with my future terrestrial prospects. Denver specialists confirmed the diagnosis and I settled down for an indefinite time. I gained rapidly, the bacilli disappeared, and in the fall it was deemed safe by my medical advisers that I might return to the east and resume my practice. I did so, set-

ting at Mechanicsville. I am entirely recovered and have been in a general night and day practice for the past seven years. In 1881 I married. My wife and daughter, aged seventeen, are in good health and are happy and contented and looking forward to added years for us all. Expressing a loyalty for and a desire to extend my regards to the class."

Dr. G. J. Dickson writes from Bovina Centre, N. Y.: "Have given a good deal of attention to the drug business, and during the past ten years have divided my time between this place and Chautauqua, N. Y., where I have spent the summers, keeping a drug store at the Assembly Grounds. The balance of the year I have practiced and kept a drug store at this place, my native town. Have been married fifteen years. Married Miss Jennie Longhian, of this town. Have three children, a boy twelve years old, and two girls, one ten years old and one seven. Time with me has gone rapidly. It don't seem possible it was twenty years ago we graduated. I often think of the boys of our class, the other classmen with whom we associated and the faculty; the rose-colored dreams in which we indulged in the enthusiasm of youth, of the songs we sang in the amphitheatre, lectures and quiz; the social student life and good-fellowship."

Dr. E. F. Fish was the valedictorian of the class. He writes from Milwaukee, Wis.: "Your letter was received some days since. I did not answer it at once, because I was so amazed and pleased to hear from you that I could scarcely believe my eyes, much less collect my thoughts. At first, I feared it was a missive from the other side of Jordan, and I couldn't decide how to address the envelope until my eyes finally rested on the words, 'Auburn, N. Y.,' that little village just beyond Syracuse, in Cayuga county, where all the girls wear red hair. Knowing, however, that you always were a kind of woman-hater, I felt assured that the color of the hair worn by the Auburn girls could not suffice to lacerate your heart.

"So you have to make a report to the class and you want to know something about me. I must confess that I do not dare to expose my entire past. I will say, however, that up to date, I have managed to keep out of jail for long terms. Many times I have been hustled into a cell, but always managed to secure my release in time to take my meals on the outside. Sometimes, I have been paid five and sometimes ten dollars to satisfy valuable loss of time supposed to have been sustained.

"Since leaving my *alma mater* I have settled down three different times in three different localities. First, I opened up in Milwaukee, Wis., and remained four years. At the end of that time, I concluded that the brewers made beer too fast for me, and I started for Montana and located at Miles City, right in the heart of the bad lands. There was no sickness in that country except here and there a case of mountain fever, and for that no doctor was required, as the tenderfeet were the only ones affected by it and they were kept on sage tea. There were

other troubles which required the attention of a doctor, regardless of whether he was competent. There were plenty of bullet holes, broken legs and arms and necks, any amount of red-headed gonococci, innocent soft boys and pretentious mountain gentlemen; and from these we reaped our reward. We generally sized a man up for all he had and demanded the full amount.

"Finally, I returned to Milwaukee, selected a new section of the city and here I am again. Have been here this time five years, and now I am too poor to move, so you will probably be able to locate me for the balance of my life among the Dutch in Badgerdom. Perhaps it might interest you to know that I am a much married man. I did it with my little hatchet about fourteen years ago. We have a large, lovely family of cats and dogs. There are six cats, two horses, one dog, and we have an eye on a parrot. I presume an inherited double epididymitis is an etiological factor to the pathological status of my procreative apparatus. In a business way, I ought not to grumble, for I find I have my full share of charity work, and a reasonable amount of work among those who stand high (six feet) in the community, but never pay. I like that kind of work. It is so pleasant to call on a patient and finding a second visit unnecessary, have the victim address you with 'Make out your bill, doctor, and send it in.' One visit! Make out your bill and then not get it. I do a little botch surgery once in a while. During the past five years, I have devoted much of my time to the emasculation of woman. I have come to the conclusion that it makes them prettier, fatter, rounder, and robs the abortionist. I am five feet five inches tall, weigh 175 pounds, can eat, drink and sleep, and I guess I enjoy life as well as any poor man who has to depend on others' misfortunes for a livelihood. Remember me *big* to all the boys."

Dr. W. B. Fish did not reply to my letter, addressed to Wheaton, Du Page Co., Ill.

Dr. C. G. Fisher writes from Austin, Pa.: "I was located in Buffalo, N. Y., but my wife could not stand the lake air, so I was compelled to move here. I am doing very well, a good practice."

Dr. Allen Fitch did not reply to inquiries. He is in New York city, prosperous and too busy to think of his old classmates, I am afraid.

Dr. H. D. Fuller writes from Seymour, Wis.: "I have been for the greater part of the time I have been west located in this place. It is one of the most active small cities in Wisconsin. In regard to myself, I have not been blessed in wordly wealth, but have a very large and extensive practice; am doing some surgery, such as comes in the way of a general practice. I am now physician to the government school at Oneida, where they educate the Indian children. The school is seven miles from my office; I visit the school three times a week, receiving a yearly salary. They have 136 pupils, twenty employes. The government has three large buildings, superintendent's building, employes' houses, etc.; all buildings have steam heat and electric light. They are now building a large hospital and are going to expend \$15,000 in enlarg-

ing the other buildings, making room to accommodate 200 children. I am also visiting physician to the Episcopal Hospital; health officer and physician of our city, also of two adjoining towns, and one of the aldermen. Therefore, I am kept quite busy. I had made great calculation on attending the meeting of the Alumni of A. M. C., but having so many irons in the fire, I am in fear if I should go away, some of them would get burnt, but if Providence permits, I will be with them next year. My family consists of wife, two boys and one little girl. My oldest boy will begin his first course in medicine this fall.

"I hope that you may hear from all of the class and that prosperity has blessed them all, and that success may crown the A. M. C."

Dr. G. W. Gregory did not answer my letters. He is located in Elmira and doing a good practice.

Dr. A. D. Hill writes from 1772 West Chicago avenue, Chicago, Ill.: "I came to Chicago ten years ago. Had no wealth when I came and but a little more now. Much of this is a fault of my own, as I had given up all ideas of becoming rich long ago. Have made a comfortable living, however, enjoy fair health and with this am learning to be content. I would like very much to see you and the rest of our class. I went east last year in June, on my vacation, or I would try to be present this year when you meet. Am afraid I cannot afford the luxury."

Dr. O. J. Hallenbeck writes from Canandaigua, N. Y.: "I like the practice of medicine in Canandaigua, as we have some advantages of the city and considerable of the country. We have a Physicians' Medical Society of this village, which has been in existence more than twenty-five years and composed of the regular practitioners of the village. We meet regularly the first Thursday of the month, ten months in the year, at the residence of the various members. We have a paper at each meeting, reports of cases, discussions, etc., and a sumptuous repast. This society, I am sure, keeps the members of the profession in a genial, wholesome atmosphere. We have induced the practitioners from the various schools to join us in a systematic and comprehensive method of making collections. We employ a collector by the month and pay him a fixed salary for his work.

"Now, to be more personal, we have lost two girls by that dread disease, diphtheria. Have now three boys and one daughter, the latter now in Ann Arbor, preparing for the university. Having in view a strong mind, she ought to have a strong body. Eight years ago I erected a cottage on Canandaigua Lake, at which place the family spend the summer. I am a trustee of Presbyterian Church, trustee of Woodlawn Cemetery, member of Board of Education, member of Konondorgna Club, coroner of Ontario county, member of State Medical Society, Central New York State Society, Ontario County Medical Society and Canandaigua City Society."

Dr. C. F. Huddleston did not reply to my letter, addressed to Albany, N. Y. He has not been in practice for some years.

Dr. O. F. Kinloch writes from 16 Fourth street, Troy, N. Y.: "In response to yours for an inventory of myself for the past ten years, I note only the following changes: Less hair on top of my head, a few more nickles in my pocket and that I am a little fatter and lazier. Otherwise, I note no changes."

Dr. W. E. Lothridge writes from Verdoz, N. Y.: "Yours of recent date received, and in reply would state that I have been located in this place for fifteen years and have met with a fair degree of success in my profession. Old Time has dealt very kindly with me, and I think I feel just as young to-day as I did when I walked the floors of the A. M. C. twenty years ago. I trust I may be enabled to meet with you and other members of the Class of '79 on the occasion of the coming reunion and then and there renew old memories and associations."

Dr. Henry Lewis writes from Argyle, N. Y.: "I am enjoying a good practice. I was married about three years ago and have purchased a home which I enjoy as much as possible without children, but have plenty to eat and drink and when the roads are not too muddy, I wear comparatively good clothes."

Dr. R. A. Linendoll writes from Fort Edward, N. Y.: "I am still doing business at the old stand where I commenced practice in the spring of 1879; and during these twenty years, as I hope all my classmates, have gathered a little 'moss.' I have a wife and two daughters, one fourteen and the other ten years. Am president of this, my native village, and all things considered, am as happy as mortals usually are. Best regards to yourself and all the boys. Sorry I cannot be with you on class day."

Dr. E. W. Masten is in the drug business in Albany, N. Y., and writes: "Do you know of an old lady, say about seventy-five, with a very bad cough and a long, very long roll of dark green that you think would like a good, kind and agreeable husband to make her declining years happy? Introduce me — Otherwise, I am happy and content with single blessedness."

Dr. J. J. D. McAllister could not be reached. Letter was returned. He is located in New York city and doing well. At the present time he is traveling in Europe.

Dr. E. L. McMillan did not reply to my letter. He is located at Hanover, Plymouth Co., Mass. We would like to hear from the doctor.

Dr. W. J. Nellis, president of the class, is in Albany, N. Y. He is stouter and more genial than in 1879. In answer to my letter, writes: "I am contented, happy and fairly prosperous. No honors have come to me from my own seeking. No honors have been given me that I feel I have earned."

Dr. P. L. Suits is at Tribes Hill, N. Y. He is younger than when we graduated. He writes: "I located at Tribes Hill twenty years ago, practiced there ever since, and have no desire to change. I have and am doing well. My health is better than it was twenty years ago. Hoping that at least as much can be said for each one of our classmates."

Dr. Daniel Sickler writes from Ogden, Iowa: "I am still at the same town that I came to after leaving the A. M. C. Have been fairly successful in life and would be pleased to attend the Alumni meeting, but the distance is too great. Kind wishes to all."

Dr. J. A. Smeallie writes from 404, 405, 406 Providence Building, Duluth, Minn.: "After my graduation on February 14, 1879, I received the appointment of assistant house physician in the Albany Hospital, which position I accepted, but resigned before entering upon its duties, owing to the length of time I would be obliged to wait and to the fact that in the interim I also had an opportunity to enter general practice with an elderly and highly respected physician (Dr. Joseph Burbeck) at Canajoharie, N. Y., with whom I formed a copartnership which it was mutually agreed should last for two years. About six months before the expiration of this partnership, I married, and at the end of the two years purchased a house and continued practice alone in the same place for nine years. During the fall of 1888, I matriculated at the New York Post-Graduate Medical School and took the full course, lasting three months. Shortly after, I sold my property and practice at Canajoharie to Dr. David I. Ozman, and removed to New York city, associating myself with Dr. Seneca D. Powell (senior surgeon at the Post-Graduate School) in his practice and acted as his first assistant at the school. In the spring of 1889, I was honored by the board of directors of the New York Post-Graduate Medical School, by being appointed instructor in clinical surgery. All went well until during the month of December, 1890, I was one of the first to be attacked with that dread disease, la grippe, which so prostrated me that I was obliged to resign everything for a time and seek to regain my lost health; with this object in view, I came to Duluth, Minn., via the Great Lakes, where after an almost complete rest of nearly three years, my health was restored to such an extent that I was again able to resume the practice of medicine and surgery (not having adopted a specialty), which I did July 7, 1893, and am still continuing. During the past twenty years, which have passed so rapidly by that I can scarcely bring myself to believe in its reality, I have met many successes and reverses, financially; and have enjoyed more than ordinary success in the practice of my chosen profession. I am now forty-six years of age and in the enjoyment of good health."

Dr. F. E. Simons is at Canajoharie, N. Y. He did not reply to my letter.

Dr. John Schoolcraft writes that he has been in Schenectady since graduation, is married but has no children; has no complaint to make of the past and will be well satisfied if the future pans out as well.

Dr. F. B. Streeter writes from Glens Falls, N. Y.: "I have practiced medicine in this village continuously since graduation with a fair measure of success."

Dr. Martin Tygert, of Calstadt, N. J., did not reply to inquiries.

Dr. T. B. Van Alstyne writes from Binghamton, N. Y.: "After graduation, I cast around looking for a 'good location' for a short time, visiting Hudson and Catskill, and also looking the field over in Albany; but finally settling at my old home, Richmondville, where my father was in practice and where since 1819 there had been a Dr. Van Alstyne—my grandfather, Thomas B. Van Alstyne, having been a highly successful practitioner of the old school.

"I practiced at Richmondville, being about as busy as I cared to be most of the time, till 1893, when, in July, I got the western fever and went to Nebraska, locating at Grand Island, a town of about ten thousand. Remained there about eight months, doing some work, but getting no cash out of it, as it was just about the time prosperity was smiling on other sections than the west.

"I returned east in the early part of 1894 and in April, located at Binghamton, N. Y. I was very fortunate in my selection of office site, and this with other benign circumstances placed me soon in an active paying practice. I now am obliged to turn away some business every day and thus can select what I want in class of patrons. In April, 1882, I was married at Richmondville to Miss Edna Mann. Two children were born as result of this union, both girls, and both of whom are yet alive, aged sixteen and fourteen, respectively. My wife died after a short sickness in April, 1892. In July, 1894, was again married to Miss Alida Mann, of Richmondville. We have no children at this writing, but manage to enjoy life thoroughly, as our tastes are similar and in the pursuit of pleasure we share our joys. From present conditions, should say I would pass the rest of my days at Binghamton, as the city is extremely pleasant and I have become so well established here that I can earn a living very easily without being obliged to hustle very hard."

Dr. C. DeW. Van Dyck is at 47 West Ninety-third street, New York city, and has a good practice.

Dr. Sheldon Voorhees is located at Auburn, N. Y. He does a general practice, is in fair health and has a welcome ready for any of the '79 Class.

Dr. Adam Walrath did not reply to letter addressed to Lasellville, N. Y.

Dr. A. W. Wilmarth writes from Chippewa Falls, Wis.: "I removed from Elwyn to Norristown, Pa., taking the position of senior assistant for the Southeastern Hospital of Pennsylvania. I remained there five years and came here to Chippewa Falls to organize the State Home for Feeble-Minded. I resigned from bachelorhood in 1891, and my wife and one boy constitute my family. I should be glad to join you in Albany were I able to do so, but cannot make it this year."

Dr. George H. Watson, of Bridgewater, Mass., has been for the past twenty years in one place. He has had a large general practice and has acquired a competency more than sufficient to enable him to live without further work. He will, however, continue until 1900, when he hopes to visit the Paris Exposition and spend a year or more in study at Berlin and Vienna. Unlike most of his classmates, he has never married.

To Dr. T. B. Van Alstyne we are indebted for the following memorial of the late Sanford J. Engle:

Several times during the past year have I chatted with my old chum and classmate concerning college days, and in anticipation we together attended the alumni meeting for the year '99—the twentieth anniversary of our common graduation at Albany Medical College. But I have come alone. Dr. Sanford J. Engle passed from earth and obtained relief from suffering February 1, 1899.

He was born at Newark, Tioga Co., N. Y., June 13, 1855. After several years' service as clerk in drug stores at his home, Union, N. Y., and also at Binghamton, N. Y., he engaged in the study of medicine and, as you all know, graduated with us in January, 1879, from A. M. C. He was a good student and he made a good physician, successful in every sense of the word.

After receiving his diploma he remained at home at Union for a few months. July 1, 1879, he was married to Miss Ella McWade, of Union. The same day they proceeded to Jackson, Susquehanna Co., Pa., and there he was very soon hard at work as a "country doctor," in a very rough, rugged country. He was very successful and his rides were long, and many times he would be obliged to get all the sleep he had in his carriage, having a driver to look after the horse. He remained at Jackson till the latter part of 1893, when on account of fast failing health, he moved to the larger town—Susquehanna, Pa. In a very short time he was enjoying a large practice there.

In December, 1898, he had an attack of the grip, which was undoubtedly responsible for his death. His old kidney trouble, from which he had suffered for years, was given a fresh start. General diffuse nephritis was the diagnosis given by Dr. John G. Orton, of Binghamton, whom Dr. Engle consulted.

In order to be near his physician he came to Binghamton to a relative's house about January 1, 1899. In spite of doctors and medicine death claimed him, and after being confined to the bed only about a week, he passed away February 1, 1899.

The funeral services at the house were conducted by his pastor, Rev. Mr. Cleveland, rector of Christ's Episcopal Church of Susquehanna, assisted by Rev. Dr. La Roche of Trinity Memorial of Binghamton. He was buried at Union, N. Y., under the impressive Masonic ceremony; a delegation from Palestine Commandery of Carbondale and also Knights of Malta from Binghamton officiating.

The doctor was well up in Masonry, having passed through the chairs at Palestine Commandery of Carbondale.

He was a faithful, consistent, communicant member of Christ's Episcopal Church of Susquehanna, and by all who knew him his death is deeply lamented. His patients every one feel that they have lost a friend as well as physician. He is survived by an aged mother, and by his wife and one child, a son—Tracy Engle, aged about eleven years.

Dr. Bayard presented the following report, as Class Historian of '89:

REPORT OF THE CLASS OF '89 — DR. A. H. BAYARD.

Mr. President and Gentlemen:

It becomes my pleasant duty for the Class of '89 to read to you to-day of its men and their varied experiences. I will, however, state that the Historian was somewhat handicapped by the fact that but twelve answered his letter. However, on the 21st day of March, 1889, forty-one men received their well-earned diplomas; of these, three have since died:

Dr. J. W. Roscoe, February 1, 1892, at Sloansville, N. Y.

Dr. Frank A. Bell, at Oneonta, N. Y.

Dr. Hurand H. Hekimian, in Armenia.

The following failed to reply, but to the best of the Historian's knowledge, reside at the places opposite their names:

Howard F. Bonesteel, Troy, N. Y. Located at Troy immediately after graduation. Winter of 1889 and '90 post-graduate, New York. Married summer of 1890. Two boys. City physician ever since graduation.

Burton S. Booth, Troy, N. Y. Surgeon with rank of major, Two Hundred and Second Regiment, N. Y. V.

James E. Brennan started practicing in Albany, N. Y., but his present address is unknown.

Charles G. Briggs, Schenectady, N. Y., is doing a large business and is very successful.

Charles S. Bumstead, No. 206 Alexander avenue, New York city.

A. Marshall Burt, Glen, Montgomery Co., N. Y.

Charles H. Callender, New Boston, Mass.

William M. Campbell, No. 144 Remsen street, Cohoes, N. Y.

Samuel Chesebrough, Glens Falls, N. Y.

Fred S. Deyoe, Hunters, N. Y.

Alfonso C. Dorval, Whitehall, N. Y.

W. G. Murphy, East Hartford, Conn., after leaving the Albany Hospital, located in Granby, Conn., where he remained two and a half years. He then removed to East Hartford, Conn. He is married, has two children, and is successful in practice.

Richard F. Duncan, 200 Almyville square, Providence, R. I., started practicing at Pleasant Falls, N. Y.; remained there for a number of years; traveled around the world for one year, and located in Albany; a year and a half ago, I understand, removed to his present location. Is married, and has one child — a daughter.

Robert Furman, Jr., last address No. 329 East Chicago avenue, Chicago, Ill. Letter returned "unclaimed."

Fred C. Gorham, Hudson, N. Y.

Elmer E. Johnston, Oneonta, N. Y.

James B. Kennah, Albany, N. Y.

Wilbur F. Lamont, Catskill, N. Y., very successful, and doing a large business.

G. Emory Lochner, No. 196 State street, Albany, N. Y. Fine business; successful.

A. G. Losee, No. 746 Broadway, Albany, N. Y.

Charles W. Nichols, Amsterdam, N. Y.

A. D. Rose, Charlestown, R. I.

James E. Smith, No. 246 Washington avenue, Albany, N. Y.

M. R. Smith, McGrawville, N. Y. Coroner of Cortland county for eight years; Cortland County Medical Society, Central New York Medical Association; health officer town of Cortland for eight years; married; no children.

Charles W. Snyder, No. 26 Bradford street, Stamford, Conn.

L. G. Somers, No. 23 South street, Rochester. I understand he is doing a fine business.

T. C. Washburn, Spencer, Tioga Co., N. Y.

H. W. Brown, No. 64 Front street, Binghamton, N. Y., writes that after graduation he located at Grafton, Mass., his birthplace. He then married and removed to Boston, Mass., in December, 1891. He states he was very successful, and held position in Boston Dispensary. On account of wife's health, returned to Grafton, where his wife finally died of tuberculosis in 1895. He then removed to Binghamton, and worked up a large practice. "At the end of two years, married a widow of that city, and has a beautiful home and one of the best of wives." He has no children. He extends a very cordial invitation to every one of the boys to call when in Binghamton, and will feel slighted if they do not.

C. E. Greenman, No. 179 First street, Troy, N. Y., located at the above-mentioned place shortly after graduation. He writes: "The last ten years have been the most important in my life, for in them I have builded the foundation of some lasting friendships (and enmities, too, I dare say), but I am happy in the belief that the former greatly outnumber the latter. Two years after graduation, married Miss Margaret Mitchell, of Waterford, N. Y., and have been blessed with two boys, one of whom died at the age of three and a half years." He thinks he is doing his share of the business, and expects to be with us to-day.

C. C. McCullough writes: "I began to practice at Harpersville, N. Y., immediately after graduation; remained there about a year and a half. Came to Albany, where I have lived since, defying 'the slings and arrows of outrageous' with varying success. I have acquired but little of the worldly goods; not much richer than I was ten years ago, except for a wife and two boys, and a somewhat varied experience. Have had my allotted share of trials, I suppose, but do not complain of the measure."

J. Montgomery Mosher: "As was known, the vacations of my undergraduate years were spent in clinical and pharmaceutical work at the Willard and Utica State Hospitals for the Insane, and immediately after graduation, I accepted the position of assistant physician at the Willard State Hospital, where I remained until the autumn of 1890. I

was then promoted to be first assistant physician at the St. Lawrence State Hospital at Ogdensburg, N. Y. This institution was in process of construction, and a great part of my time and interest was devoted to the work of organization. In the fall of 1895 I resigned. I spent the following year in study in Europe, and opened an office at my present address, No. 202 Lark street, Albany, in July, 1896, where I have since remained. Was married in March, 1890. Have two children, a boy and a girl."

E. Niver, Hillsdale, N. Y.: "I may say my experiences have been the usual. Some patients recover, and are very grateful for my kind attention, and are ready to compensate accordingly; others not so grateful, and care only about getting well — 'Will see you some time;' still others gently 'pass away,' and leave us in doubt as to the success of our treatment, and the amount of estate left by the deceased. My work is that of a general practitioner situated in a country village. Of my success, I know hardly what to say, as I cannot give accurate statistics of births and deaths, but of marriages, I have but one, and that is the most satisfactory and successful of anything in my life, my wife being the daughter of my preceptor, the late Dr. Richard Beebe, Alford, Mass., who has two sons, both graduates of the Albany Medical College, and very successful. We were married January 1, 1895, but to present date, have not been blessed with children, but wait. With nine years' practice in this place, in a financial way I have been quite successful. I have a comfortable and pleasant home, with a small bank account, which continues to increase rather than diminish each year. It is my wish, and I shall make every effort to be present, and meet you all at the college and answer roll-call."

Dr. A. T. Powell, Coeymans, N. Y.: "The day after graduation, I opened an office in Coeymans Hollow, and in about three months was on a self-supporting basis. The next year I removed to Coeymans, N. Y., where during the next five years, in addition to village work, I had an extensive country ride. In 1894, I married Elizabeth Bronk, and now have one daughter four months old. I have enjoyed the practice of medicine very much, and sometimes think it is worth pursuing just for the fun of the thing."

W. R. Seeber, Milford, N. Y.: "On April 1, 1890, I commenced practice in partnership with my father in Milford, N. Y. After staying with him until August 1, 1890, I removed to Port Dickinson, N. Y., remaining there four months; then finding a good opening in Binghamton, N. Y., opened an office there December 1, 1890; met with good success; stayed there until April 20, 1892, at which time my wife's mother died, and moved to my old home, and opened a drug store, and followed the business until November, 1893, when I sold and returned to Binghamton, and had only been there five months when I returned to Milford to take care of my father, who had Bright's disease, besides taking his practice. Have since remained here. Have a good ride; also make a good living."

F. S. Snow, Hartford, Conn.: "After graduation, opened an office at Valatie, N. Y. Remained there for a number of years; married and removed to Hartford, Conn., to accept the chief medical director of the Hartford Life Insurance Company, which position I now fill. Will try to be present with you."

J. R. Strang, Visscher's Ferry, N. Y.: "Eight months after graduation, I found my present location, and have remained here ever since. My work is essentially a country practice with all the varied experience that comes to most physicians; at times full of anxiety over the result of an important case, or animated and happy by the outcome of a serious illness. I have been surrounded by a fair amount of success. Was married in January, 1892, and have one son six months old. I extend to all my old classmate friends happy greeting and best wishes, with hopes that I may be able to be present."

William Van Doren, Mechanicville, N. Y. To the best of the Historian's knowledge, Dr. Van Doren located at Delanson shortly after graduation and removed to present address in 1891; married; no children; surgeon fire department; member Troy and vicinity Medical Association.

M. J. Zeh, No. 1429 Broadway, West Troy, N. Y.: After graduation, located the following month in West Troy, where he has since resided, and been eminently successful in his profession. In 1890, he married Miss Charlotte B. Cullen, a sister of the late Dr. Archie Cullen, of West Troy. Has two children; a son and a daughter. Dr. Zeh is a member of the New York State Medical Association of Troy and vicinity, Rensselaer County Medical Society, and is medical examiner for many insurance companies. He was city physician three years, and is a thirty-second degree Mason.

A. H. Bayard, Cornwall-on-Hudson, N. Y., after graduation, took post-graduate course at the New York Polyclinic, and for two months was in old Chambers Street Hospital, New York. Practiced for a short time in Poughkeepsie, N. Y., then removed to Albany, where he remained for seven years. In May, 1898, his uncle, Dr. A. L. Browne ('86), died at Cornwall-on-Hudson. He then took up practice at that place, and has met with splendid success. In October, 1890, he married Miss Orlena A. Hunting, daughter of Dr. Nelson Hunting, of Albany, N. Y., and has been blessed with two children, boy seven years old, and a girl who died at the age of three and a half months. He was Albany county physician for two years; is a Mason; secretary of the Cornwall Board of Trade; treasurer of the Cornwall-on-Hudson Public Library; surgeon of the West Shore Railroad, and examiner for many insurance companies.

The Recording Secretary stated that biographical notices of deceased members of the Association had been published in the ALBANY MEDICAL ANNALS during the year, and requested members of the Association to forward biographical sketches of deceased alumni. He then read the following

NECROLOGY.

- Dr. Edwards Hall ('44), at New York city, December 10, 1898, aet. 80.
Dr. William H. Bailey ('53), at Albany, N. Y., June 24, 1898, aet. 73.
Dr. Henry C. McNaughton ('56), at Albany, N. Y., April, 1898.
Dr. Robert Loughran ('57), at Kingston, N. Y., April 11, 1899, aet. 67.
Dr. Porteous C. Gilbert ('64), at Saratoga, N. Y., June 11, 1898, aet. 57.
Dr. Charles S. Grant ('66), at Saratoga, N. Y., February 6, 1899, aet. 53.
Dr. Xyris Turner Bates ('67), at Poughkeepsie, N. Y., January 2, 1899,
aet. 59.
Dr. William Morgan ('69), at Albany, N. Y., November 7, 1898, aet. 56.
Dr. Charles McCulloch ('77), at Gloversville, N. Y., October 15, 1898,
aet. 52.
Dr. Uriah B. LaMoure ('78), at Albany, N. Y., March 2, 1899, aet. 55.
Dr. Sanford J. Engle ('79), at Binghamton, N. Y., February 1, 1899.
Dr. Evert P. Van Epps ('81), at Schenectady, N. Y., January 7, 1899,
aet. 49.
Dr. Stephen H. Webster ('86), at Troy, N. Y., January 6, 1899, aet. 33.
Dr. Alfred L. Browne ('86), at Cornwall-on-the-Hudson, N. Y., May
3, 1898, aet. 35.

The committee appointed to nominate officers presented the following report, which was read by its Secretary, Dr. W. W. Scofield:

For President,

DR. JAMES H. MITCHELL ('81), Cohoes, N. Y.

For Vice-Presidents,

DR. WM. E. LOTHIDGE ('79), Niskayuna, N. Y.
DR. EDGAR S. SIMPKINS ('90), Middleburgh, N. Y.
DR. ELMER E. LARKIN ('85), Plattsburgh, N. Y.
DR. GEO. P. K. POMEROY ('78), Stuyvesant, N. Y.
DR. ADAM Y. MYERS ('82), Buskirk's Bridge, N. Y.

For Recording Secretary,

DR. J. MONTGOMERY MOSHER ('89), Albany, N. Y.

For Corresponding Secretary,

DR. ANDREW MACFARLANE ('87), Albany, N. Y.

For Treasurer,

DR. THEODORE F. C. VAN ALLEN ('83), Albany, N. Y.

For Historian,

DR. HARRY S. PEARSE ('92), Albany, N. Y.

For Members of Executive Committee (term three years),

DR. A. VANDER VEER ('62), Albany, N. Y.

DR. MARTIN MACHARG ('84), Albany, N. Y.

DR. C. HARPER RICHARDSON ('97), Albany, N. Y.

DR. E. HUDSON RIDER ('88), Albany, N. Y.

On motion of Dr. D. H. Cook, the report was accepted and adopted, and the Recording Secretary was instructed to cast a ballot in behalf of the Association for the gentlemen named therein. Dr. Rulison was appointed teller; the ballot was cast, and those named in the report were declared by the President duly elected officers of the Association for their respective terms.

The Corresponding Secretary, Dr. A. MacFarlane, read letters from the following members of the Association unable to be present:

H. D. Didama ('46), A. Burt, Jr. ('61), E. V. Stoddard ('63), Benj. D. Gifford ('66), Wm. Asbury Hall ('75), George F. Barker ('77), S. E. Ullman ('80). He also read letters from the following expressing regret at their inability to be present at the alumni dinner: Hon. T. J. Van Alstyne, Rev. Wallace Buttrick, Hon. Amasa J. Parker, Hon. S. W. Rosendale, Clarence Rathbone, Esq., Hon. Abraham Lansing, E. D. Palmer, Esq., Hon. David Murray, J. Townsend Lansing, Esq., Edward A. Durant, Esq., Richard V. DeWitt, Esq., Osgood H. Shepard, Esq., Jesse W. Potts, Esq., Henry P. Warren, Esq., Hon. Alden Chester, Hon. Wm. L. Learned, Dr. Baxter T. Smelzer. He also acknowledged the receipt of photograph from Dr. William Asbury Hall ('75).

Dr. Mitchell, President-elect, was introduced to the Association and thanked the members present for the honor conferred upon him, and assured them of his desire to do all in his power to promote the prosperity of the Association.

The President read a call for a meeting of ex-resident medical officers of the Albany Hospital, to be held in the Chemical Lecture Room, directly upon adjournment of the Association, for the purpose of organizing a society.

The Recording Secretary announced that out-of-town members of the Association would be entertained at the Albany Club at lunch, and that the house of the club would be open to them for the day. The order of exercises for the afternoon and evening was announced, and, no other business appearing, the meeting adjourned.

COMMENCEMENT EXERCISES.

The sixty-eighth commencement exercises of the Albany Medical College were held at Harmanus Bleecker Hall, on Wednesday afternoon, April 19, 1899, at three o'clock, in the presence of a large audience. Rev. Dr. A. V. V. Raymond, President of Union University, presided, and upon the stage were seated the members of the Faculty, officers of the Alumni Association and prominent citizens.

The following was the

ORDER OF EXERCISES.

Overture — "Prelude and Siciliana from *Cavalleria Rusticana*,"
— *Mascagni*

Prayer — Rev. J. WALTER SYLVESTER.

Music — SELECTION: "The Idol's Eye," - - - - - *Herbert*

Essay — FREDERICK DOUGLAS BRANCH.

Music — DESCRIPTIVE FANTASIE: "The Cavalry Charge," - - *Lüders*

CONFERRING DEGREES.

BY ANDREW VAN VRANKEN RAYMOND, D. D., LL. D.,
President of Union University.

Music — ENTR'ACTE ET VALSE: "Coppelia," - - - - - *Delibes*

Address — Prof. WILLIAM R. TERRETT, D. D.,
Hamilton College.

Music — "Pastimes on the Mississippi," - - - - - *Krell*

Valedictory — EDGAR ROSCOE STILLMAN.

Music — CAPRICCIO: "Amaranthus," - - - - - *Gilder*

REPORT ON PRIZES AND APPOINTMENTS.

BENEDICTION.

Music — MARCH: "American Volunteers," - - - - - *Tobani*

The Graduating Class was as follows:

John Milton Adey.....	Cohoes, N. Y.
Clifford Henry Allen.....	Albany, N. Y.
George Everett Beilby.....	North Sanford, N. Y.
Austin Westley Bender, Jr.....	Utica, N. Y.
Lester Betts	Grooms, N. Y.
Frederick Douglass Branch.....	East Springfield, N. Y.
William John Cavanaugh.....	Worcester, N. Y.
Charles Rodgers Conklin.....	Albany, N. Y.

Augustus Ernest Cordes, Jr.....	Hoosick Falls, N. Y.
Gilbert Worden Crissey.....	Troy, N. Y.
Fred Augustus Deal.....	Green Island, N. Y.
Nicholas James Delehanty, A. B.....	Hydeville, Vt.
Joseph Orrin DeSobe.....	Albany, N. Y.
James Edgar Doig.....	East Meredith, N. Y.
Warren Harkness Everett, A. B.....	Peru, N. Y.
Adolph Richard Vandermoor Fenwick.....	Schenectady, N. Y.
George Houghton Fish.....	Saratoga Springs, N. Y.
James Henry Flynn.....	Lansingburgh, N. Y.
Edward Paul Foley, A. B.....	Schenectady, N. Y.
Rupert William Ford.....	Mount Upton, N. Y.
Albert Ellsworth Garland.....	Albany, N. Y.
Christian Gottlieb Hacker, Ph. G.....	Albany N. Y.
Julius Eugene Haight.....	Matteawan, N. Y.
Henry Powers Hammond, A. M.....	San Francisco, Cal.
Edward L. Hanes.....	Albany, N. Y.
Dean Samuel Harrison.....	Mount Vision, N. Y.
William Gregory Healey.....	Cohoes, N. Y.
Eugene Eunson Hinman.....	Albany, N. Y.
William Thomas Hudson, Ph. B.....	Auburn, N. Y.
Walter Leslie Huggins, Ph. B.....	Salamanca, N. Y.
Harry Fisk Hull.....	Lansingburgh, N. Y.
Howard Frost King.....	Thomsonville, Conn.
Robert Ernest Kinloch.....	Troy, N. Y.
William Kirk, Jr., A. B.....	Delmar, N. Y.
William Thomas Knowlton.....	Wilbraham, Mass.
Thomas John Lally.....	Pittsfield, Mass.
Joseph Aloysius Lanahan.....	Albany, N. Y.
Walter Adnah Leonard, A. B.....	Hoosick Falls, N. Y.
Whittlesey DuBois Lester.....	West Hebron, N. Y.
Bernard Livingston	Schoharie, N. Y.
Berthier Whitford Mather, A. B.....	Loudonville, N. Y.
Daniel Albert McCarthy, A. B.....	Troy, N. Y.
James Edward McDonald.....	Cohoes, N. Y.
Peter Harris Moak.....	Albany, N. Y.
Ransom Sanford Moscrip.....	East Meredith, N. Y.
Leon Gray Ogden.....	Allen's Hill, N. Y.
Karl Albert Parshall.....	Cooperstown, N. Y.
George Sanford Post.....	Fulton, N. Y.
William Hugh Ranken.....	Troy, N. Y.
George Washington Ross.....	Loudonville, N. Y.
Thomas William Salmon.....	Lansingburgh, N. Y.
Walter Howard Sanford.....	Westfield, Mass.
Isaac Beers Schaubert.....	Green Island, N. Y.
Clayton Earl Shaw.....	Hoosick Falls, N. Y.
Fred Adams Smart.....	Mariaville, N. Y.

Edward Shepard Smith.....	Westfield, Mass.
Lee Somerville	Sodom, N. Y.
Edgar Roscoe Stillman.....	Troy, N. Y.
Byron Luther Sweet.....	Petersburgh, N. Y.
George Scott Towne.....	Saratoga Springs, N. Y.
Merritt Elmer Van Aernem.....	Saratoga Springs, N. Y.
Francis Edwin Vander Veer, B. S.....	Springfield Center, N. Y.
Michael Francis Wansbury.....	Troy, N. Y.
William Allen Wardner.....	St. Regis Falls, N. Y.
Harry J. White.....	Lansingburgh, N. Y.
Howard Lattin Wood, Ph. G.....	Brooklyn, N. Y.
William Hamilton Young.....	Van Hornesville, N. Y.

Dr. Ward presented the prizes. He read a report on the Vander Poel prize, endowed by Mrs. Gertrude W. Vander Poel, in memory of her husband, the late S. Oakley Vander Poel, M. D., for many years a professor in the college, stating that this prize, consisting of a clinical microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, had been awarded to Dr. Christian G. Hacker; and that at the competitive examination for hospital positions, the following appointments had been made: Albany Hospital, Drs. Christian G. Hacker, H. J. White and George E. Beilby; St. Peter's Hospital, Drs. Frederick D. Branch and Byron L. Sweet; Ellis Hospital, Schenectady, Drs. Walter L. Huggins and Lester Betts.

The prize offered by Drs. Vander Veer and Macdonald for the best report of the surgical clinics was awarded to Dr. Berthier W. Mather, and that offered by Drs. Hailes and Morrow for the second best report was awarded to Dr. George W. Ross.

The prize consisting of an ophthalmoscope, offered by Dr. Merrill for the best report of the eye and ear clinics, was awarded to Dr. Francis E. Vander Veer.

The Townsend Physiological prize endowed by the late Professor Franklin Townsend, Jr., M. D., was awarded to Mr. E. N. Reed, for passing the best examination in physiology at the end of the first year of study.

Dr. Boyd's prize to the student passing the best final examination in obstetrics was awarded to Dr. Christian G. Hacker.

The prize consisting of a case of surgical instruments, offered to the senior student passing the best final examination, by Dr. T. W. Nellis, was awarded to Dr. Christian G. Hacker.

The prize offered by Dr. H. R. Powell to the second-year student passing the best final examination, consisting of a general operating case, was awarded to Mr. E. A. Sweet.

A prize consisting of Gross' complete pocket case of instruments, offered by A. B. Husted & Co. to the first-year student passing the best final examination, was awarded to Mr. Willis E. Merriman, Jr.

Dr. Bigelow's prize for the best dry preparation of the nose and nasopharynx was awarded to Dr. George W. Ross.

Dr. Blumer's prize, consisting of a microscope and accessories, to the second year student presenting the best record for laboratory work in pathological anatomy, was awarded to Mr. George Lenz.

THE ALUMNI DINNER.

The twenty-sixth annual dinner of the Alumni Association was held at the "Stanwix" on Wednesday evening, April 19th, 1899, at half-past eight o'clock. About one hundred and fifty were present, including members of the Association, the guests and members of the Graduating Class.

After the tables had been cleared, cigars passed and the "Greeting to the Alumni" sung, the following toasts were responded to, Dr. Herman Bendell acting as toastmaster:

1. "The President-Elect," Dr. James H. Mitchell
 2. "Our Association," Prof. Willis G. Tucker, M. D.
 3. "The Army," Major F. J. H. Ebstein, U. S. A.
 4. "The Board of Trustees, Albany Medical College," Hon. Charles Tracey.
 5. "Union University," President A. V. V. Raymond, D. D.
- The "Triangle Song" was then sung.
6. "The Clergy," Rev. W. F. Whitaker, D. D.
 7. "The Faculty," Prof. Samuel B. Ward, M. D.
 8. "The Medical Society of the State of New York," Dr. W. G. Macdonald.
 9. "Medical Legislation," Dr. A. G. Root.
 10. "The Class of '99," Dr. Daniel A. McCarthy.

The "Parting Ode" was then sung to the tune of "Auld Lang Syne," and the toastmaster, in a few remarks, declared the reunion of '99 at an end.

ALBANY MEDICAL ANNALS

Original Communications

VAGINAL AND VENTRO-FIXATION OF THE UTERUS.*

BY DR. GUSTAV KLEIN,

Privatdocent in the Royal University of Munich.

Translated for the *Albany Medical Annals*

BY H. L. K. SHAW, M. D.

With what zeal was "Vaginal Fixation" of the uterus employed only a short time ago upon thousands of women who were eager to be benefitted thereby! And to-day in the case of childbearing women the operation is never undertaken by its introducers.

This change of view has been brought about through numerous severe disturbances in the course of the birth, repeatedly terminating fatally, which occurred *intra partum* in women in whom the entire wall of the uterus had been fastened to the vagina. By this "high fixation" the pregnant uterus is hindered in rising out of the pelvis in a normal manner. A stretching results not only of the attached wall but also of the posterior wall which is thinned during the birth and the head of the child cannot enter the stretched, dilated cervix which is diverted posteriorly. In many cases the termination is a rupture of the uterus, in others a Cæsarian section, both of which are generally fatal. There was shown only

* From a discourse before the Gynæcological Society of Munich.

four weeks ago before this Society a specimen of ruptured uterus in a woman upon whom the operation of vaginal fixation had been employed.

The mortality of this operation even in the hands of one of its introducers, namely Dührssen, was lamentably large notwithstanding the fact that the affection *Retroflexio Uteri*, is one which almost never proves fatal. Dührssen¹ had a mortality of 1.9 per cent. in 365 cases of the vaginal and vesical fixation.

Madlener,² concerning this operation wrote out of Amann's Clinic in November, 1895, "We now operate in every case of retroflexion which causes much disturbance because with a movable uterus colpotomy is a light interference," and further "in *inversio vaginæ* with retroflexion we now principally employ vaginal fixation." Now after so sad an experience Amann, Jr., said only four weeks ago before this Society "I long since abandoned the operation."

Instead of the "higher" fixation an operation is now made likewise in numerous cases called the "lower" or vesicofixation which consists in opening the anterior wall of the vagina and suturing the uterus about an inch above the internal os, with the bladder. Madlener reports concerning this operation that during three years in a small German town he made about 47 lower fixations and among those 33 for *retroflexio uteri* alone (the uterus being movable in 15 cases and unmovable in 18) and in 10 cases the uterus was fixed on account of prolapse. If the lower or vesical fixation apparently does not cause any disturbance during the course of the birth yet it meets with another reproach—it will yield no permanent results and many relapses will occur.

Many operators at the same time as the fixation of the uterus perform operations in order to make the woman unfruitful, to render her sterile. Thus Madlener in the lower fixations of the uterus described above has made the woman sterile in five cases by means of partial resection of the tubes. Two of these cases were for *retroflexio uteri* alone and three for *prolapsus uteri*. He says "I hold that in severe cases of prolapse without enlargement where the women are in poor physical condition on account of having borne many children the sterilization is indicated."

In similar manner other operators have removed the entire uterus in *prolapsus* and have made a plastic operation on the vagina. This certainly is necessary in severe cases if in spite of the operative interference a relapse of the vaginal prolapsus occurs. Surprisingly frequent is it if, for example, Amann, Jr., in six weeks removed the uterus in two cases of prolapsus!

Personally I have not done it once during the past six and a half years in spite of numerous operations for prolapse. On this account I take the stand that it is permissible to remove the uterus in women during the child-bearing period *only* when a real danger to life may occur in a new pregnancy or delivery. May the uterus never be extirpated for a retroflexion!

Just in these cases in which the indications are not sufficient, lies quite a danger not only for the woman but—for the woman's physician.

Bland Sutton and Giles³ say concerning the "high" vaginal operation, "We must consider it as condemned by its results and as an unjustifiable operation in the case of women of childbearing age."

Rather uncertain in its effects is the "lower" vaginal or vesical fixation which results in, and will probably in the future yield, many relapses.

My own experience with ventro-fixations has been as follows:—among 2000 cases I have had 221 cases of retroflexions and retroversions and in 16 cases I performed a uterine fixation which has invariably been a ventro-fixation. The indications of the operation in these 16 cases were, retroflexion five times, primary prolapse of the uterus once, and in ten cases it was necessary to fix the uterus after cœliotomies and adnexa operations. The following methods were employed: after Olshausen,⁴ (attaching the ligamentum rotundum to the inner abdominal wall) in two cases; after Czerny-Leopold⁵ (suturing the anterior uterine wall about one inch below the fundus to the inner abdominal wall) in six cases; and by a combination of both methods in eight cases. The results were: the uterus continued anteflexed in fourteen cases—the examinations covering a period of from five months to four and a half years. One case operated upon four and a

half years ago soon relapsed on account of a development of a myoma in the posterior uterine wall. The operation in the remaining case was very difficult owing to the inflammatory shortening of the ligamentum latum and only the left border of the uterus and its ligamentum rotundum could be united with the abdominal wall. A relapse shortly occurred in the position of the uterus which was however accompanied by none of the distressing symptoms ascribed to retroflexions. Of the five cases operated upon for retroflexions alone, two, in spite of the uterus remaining anteflexed, soon had a return of their old complaints, the so called retroflexion disorders. These cases and the one in which there was a return in the position of the uterus unattended by any of its annoyances, show that in many cases the retroflexion is not the cause of the symptoms but neurasthenia, hysteria, bowel atony, etc. Theilhaber⁶ also pointed this out only I cannot agree with him if he holds it to be true in all cases of retroflexion.

A long continued use of the pessary was employed under my personal observation in all the cases operated upon by me before the operation was undertaken. Notwithstanding this, errors cannot always be avoided as shown by the three cases cited above. Deduct these, and the one in which a relapse occurred owing to the growth of a myoma, and there remains twelve cases in which all difficulties were removed by the continued anteflexion of the uterus.

In some cases the uterus gradually slips within the true pelvis although it remains anteflexed, which is contrary to the view held that the ventro-fixation creates an abnormal position of the uterus by pulling the fundus out into the false pelvis. The slipping down of the uterus is explainable partly by the slipping of the ligamentum rotundum through the ligatures and partly because the elastic peritoneum is stretched downwards by the uterus and the ligatures slowly slip through the fascia. It is therefore possible to expect that in this way relapses can occur after the lower vaginal and vesical fixations.

Pregnancy occurred in none of my cases. This was hardly to be expected since in ten cases the adnexa on one or both sides had been removed and of the five cases operated upon for retroflexion alone, only three were married. Birth dis-

turbances rarely occur, to my knowledge, after ventro-fixation by either the method of Olshausen or that of Czerny-Leopold.

In conclusion: Disturbances apparently due to retroflexion are explainable in many cases not on account of the change in the position of the uterus but on account of hysteria, neurasthenia, bowel atony, etc. Here fixation of the uterus is not indicated.

The operation for ventro-fixation should only be performed after the pessary treatment under careful observation, has proved unsuccessful.

It is important and advisable to limit the employment of all other fixation methods as much as possible.

The use of the pessary remains the safest means of treatment and is sufficient therapy in most cases.

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3. Bland Sutton and Giles, "The Diseases of Women." London, 1897; page 377.
4. Olshausen, Hofmeier's "Gynäkol. Operationen." 2. Auflage, pp. 317, 320.
5. Czerny-Leopold, eod. loco, pp. 317, 320.
6. Theilhaber, Monatsschrift für Geburtsh. und Gynäk., Vol. II.

PROVISION FOR THE CRIMINAL INSANE.*

By H. E. ALLISON, M. D.,

Medical Superintendent of the Matteawan State Hospital,
Fishkill Landing, N. Y.

As members of this Congress we must all agree with the statement made by Dr. Richardson, in the paper he has just read, that there are many instances among criminals, where it is simply a matter of opinion whether a man is responsible or not. Nevertheless, it is the duty of some one to decide. Human judgment is not infallible, but it is the only tribunal we have. Men must be declared either responsible or irresponsible, and, where there is a question of doubt in the defective classes, we would favor sending such defectives to a reformatory for teaching and training, rather than to an asylum for the insane. All of us are endowed by nature with different degrees

* A discussion before the National Prison Association of the United States, at the Prison Congress held at Indianapolis, October 15 to 19, 1898.

of intellectual powers, but the question of insanity conjoined with crime does not arise except in special instances, and in such instances some one must be the judge of our responsibility. The insane should not be held responsible for their acts, but this does not relieve them from the consequences. They should be sent to an asylum provided for them and there kept until safe to be at large.

We may fairly assume what a sane man will do. We can reason upon his acts and with some degree of certainty, predict them. If a sane man commits a crime, through jealousy or through revenge, we feel, if guiltless of wrong, that we are not endangered by his act but only the person against whom he has a grievance. We hold a man responsible if he commits an assault from such motives of jealousy or revenge and sentence him to prison to teach him self-control and to deter others from doing the same thing. But, with the insane man, it is different. No one knows what wild fancies govern him and cannot foretell what violent act he may commit. He imagines he is persecuted by imaginary enemies and his victim is usually an innocent person. It may be you, or your neighbor. We are not safe with such men at large in the community. If the insane man commits an assault, and if we ignore his insanity and hold him responsible, he is sent to prison from which he is soon free, and you, or anyone whom his fancy may select, are again in danger from him. He should be committed to an asylum and the court in effect should say: "This man is not responsible, do not discharge him while such irresponsibility exists." The moment his irresponsibility is declared by the court he should be taken into custody. It is true an insane man can control himself and yet it is true only in part. A patient ill with typhoid fever can often walk about, but eventually must go to bed, and it is a wise physician who places him there in the early stages of his disease. It is so with the insane. They can in a measure control their acts, but as soon as a criminal is recognized to be insane, he should be taken out of prison control and placed in a hospital.

In receiving patients from the courts, we are usually furnished full transcripts of all the proceedings of the trial, but with commitments from the prison of convicts declared to be insane while undergoing sentence, we obtain no details of the

mental condition which led to the criminal act. In the first instance, we have all that is known of the patient and all the particulars of his individual life history; in the latter we get very little. The man is supposed to be sentenced for a term and we lose sight of his individuality.

We believe that the matter of responsibility should be decided. The courts should investigate the subject thoroughly where the question is raised, but in our experience the plea is not interposed often enough and insane persons are sometimes improperly convicted. It should be the duty then of the officers in charge of our penal institutions to study this question of insanity and to place the insane, if such are found, in proper custody.

Hospitals for the care of the criminal insane should exist, fitted to take care of just such unfortunate persons. The time has long passed when not only the criminal class but the insane as well, were confined in prisons, and were herded in masses without regard to individual characteristics and without attention being paid to anything but mere custody and detention. There have been great advances made in penology, and it is from those who are experienced in the care of criminals that reforms in the restraint of these people must come.

The inmates of our penal institutions should be classified. The study of any subject is advanced by classification, and it is through classification that all progress is made. We recognize the first offender who may have fallen in his early years, and we provide for him reformatory influences, educational, moral, and industrial, in order that we may instill into his mind right ways of thinking, right principles of acting, and thus enable him to become a self-supporting and desirable citizen. We recognize also the second offender, one whose inclinations may perhaps have been good, and who through adversity has fallen again a second time, but whose character and physical and mental developments, in some few instances, are such as to lead us to hope that there is still a prospect of saving him from a life of crime. We recognize also the habitual criminal, he who has passed beyond such influences; the criminal who is professional by nature, who is incorrigible to all influences for good, and, as a rule, beyond the reach of reformatory methods; and we classify him accordingly.

There is, however, a class of offenders to which too little attention has heretofore been paid in the various prisons of both the United States and Canada, namely, the insane criminal.

Society should not wish to confine a person any longer than is necessary to effect a reformation of character. Various methods have been adopted to insure this result; the indeterminate sentence, the parole system, reformatory methods, cumulative sentences for habitual and incorrigible criminals. We are in hearty accord with every effort in these directions, but we should go farther.

There is a certain proportion of inmates in every penal institution who are epileptics, paranoiacs, imbeciles, or who are unquestionably suffering from various other forms of mental disease, such as acute and chronic mania, melancholia, paresis and the various forms of dementia. These cases are too often unrecognized. They constitute, in the aggregate; a class of numerous individuals, who are dangerous in their proclivities, who are not amenable to ordinary methods of discipline, and who are unsafe to be at large. Wherever they may be, they are a threatening and disturbing element. Such persons should all be removed from the custody of the prisons, and if possible, placed in special institutions erected for them.

The first study of society in the care of the insane should be its own protection, and next the protection of the individual. While it is a matter of charity and benevolence that large and often palatial hospitals for the insane are erected in nearly every state of the Union, nevertheless a higher duty than that of charity, namely, self protection, demands that the criminal class of the insane, first of all, should receive proper custody and care.

We advocate the doctrine of irresponsibility in mental disease, and hold that such a doctrine offers the best guarantee of safety from insane criminal acts.

It is irrational to sentence to a short term in prison a lunatic who by reason of an insane delusion commits an assault with intent to kill, and then, while still actuated by his insane ideas, to release such an individual at the expiration of his term. He should be confined so long as his mental condition renders him unsafe to be at large. Many persons properly interpose the plea of insanity as a defense for crime, especially

for the crime of murder, or of the lesser degrees of manslaughter or of assault with intent to kill. The plea often fails through public distrust of the genuineness of such a defense and these persons are convicted and sent to prison for a short term of years, when they are again released to commit fresh crimes. In states where provision is made for the transfer of such cases to an asylum for the insane, they are held until recovery, or until they are reasonably safe to be at large, either through dementia or the progress of their disease rendering it proper for them to be returned to custody of friends or to other institutions for the insane.

The Matteawan State Hospital has, at the present time, detained in its charge two hundred and twenty-one inmates with expired terms, who while undergoing imprisonment have been transferred to our custody from the prisons. Many such individuals have committed more than one assault, and others more than one homicide, before having been declared insane by the prison authorities and reaching us. We are often in receipt of letters from the friends of such patients or from members of the community in which they have resided, protesting against their release. These letters come to us at about the time of the expiration of their sentences, giving us their history in full and requesting that on account of the danger to the community, they be not discharged. If an insane person commits a crime and is sentenced to prison and his mental condition there is not detected, he is released at the expiration of his term; while on the other hand, if the plea of insanity prevails in court and he is committed to an asylum for insane criminals, the court directs that he shall remain until he has recovered; and in this way the hospital protects society as to the criminal insane better than a prison. We were interested in hearing the warden of one of our penal institutions state that the population of that prison had almost entirely changed during the six or seven years of his wardenship; and by comparison we were led to examine into the condition of residents at the Matteawan State Hospital, and found that with us there were very few discharges, the population of the institution growing from year to year, retaining its old inmates and receiving others, so that during the past seven years we have increased nearly three hundred per cent.

At the same time we investigated the length of term actually served by men in prison, and compared such terms with the period of residence in the Matteawan State Hospital of persons who had been discharged or died, thus terminating their imprisonment. It was found that the average length of detention in the hospital was thirty-three per cent. greater than it would have been had the hospital patients been sentenced to the prisons. As we have stated, we believe in irresponsibility for crime which arises as the product of disease; and where it can be shown that the motives which govern the individual come from the stress of an impaired mind, such a person should be declared irresponsible and sent to an asylum for the insane. At the same time we recognize that there are very many cases on the border line; that there are very many individuals of weak intellect upon whose mental condition and degree of responsibility doctors, wardens and courts will disagree. There are many men and women of inferior endowments, whose responsibility is a matter of opinion; and where it is perfectly right for a jury to decide. Concerning them human judgment is liable to error in one direction or another. Imbeciles have been sent to prison who should have been committed to an asylum for the insane, and weak-minded persons have been sent to insane asylums whose proper place was in prison, who had strength of mind and body to benefit by a term of penal discipline under reformatory methods. These mistakes occasionally will be made.

No persons are more competent to correct these evils than the physicians and wardens of the various penal institutions and the superintendents of the asylums for the insane. In fact, in such cases, we repeat, it is often better that persons charged with minor offenses and concerning whose responsibility there is an element of doubt, should be sent to prison to serve a short term, there to undergo reformatory and disciplinary measures before being discharged. If the offender is declared to be an imbecile, and sent to an ordinary asylum for the insane for the commission of some simple crime, such declaration carries with it virtually an order committing him for life. But on the other hand, many defective people are wedded to criminal ways through their natural mental defects, and are incapable of cure. If committed to the prison, their

mental condition should be a subject of a most careful inquiry and scrutiny.

In all these institutions of a penal character, the physician should be required by law to examine thoroughly into the mental and physical characteristics of every inmate coming under his charge, with a view to determining the best possible disposition of such an individual. It would be better if the prison physician could have an experience in some hospital for the treatment of the insane, in order to weed out such cases from the prisons as are proper for asylum care. The laws should be so framed as to impose duties upon them in the way of recording the mental status of every inmate of the prison.

New York, Michigan, Massachusetts, Illinois, Connecticut, the kingdom of Great Britain and other governments have already established hospitals for the insane criminal. California and Pennsylvania are actively interested in a similar movement. We believe there is a great reform coming, one which will be appreciated by the officers in charge of prisons as relieving them of a very undesirable element and properly providing for them elsewhere, and which will mark a great advance in criminology and psychiatry.

Such an institution should not be a part of a prison and should not be subject to the discipline of a prison; but should be administered upon the plan of an asylum for the insane. Our prisons, penitentiaries and jails are filled with the defective classes. The science of criminology has endeavored to classify them. By many people such classification is regarded as an effort not only to relieve the individual of all responsibility for the commission of crime, but to effect his freedom from the hand of the law. On the contrary it should only result in holding him in a stronger grasp. Every sane man should be held to a strict accountability, but he should not be confined longer than is necessary to effect a change of character and disposition. The epileptic, feeble-minded and the insane, however, are not amenable to ordinary penal discipline, and should be removed therefrom.

It is a subject for serious thought. The criminal insane are of a different character from the insane of an ordinary hospital. Patients are committed to the custody of a general

hospital, affected with acute forms of insanity, from which they often recover and from which there is a large hope of relief. The criminal insane, on the contrary, suffer from chronic and sub-acute forms of disease which are not amenable, in the majority of cases, to cure. Most of the crimes committed by them are crimes against life and crimes against the person, and are instigated by revenge, not for real but for fancied grievances. These patients are filled with ideas of persecution, delusions of having been wronged, of having been poisoned, of having been followed about by enemies who seek to do them harm; and they commit their crimes through a mistaken feeling that they are acting in self-defense and for their own protection. These cases are chronic and pronounced in their character; and notwithstanding the sympathy which we have for them in their condition, it must be confessed that the majority offer little hope of restoration, nevertheless, they should be properly cared for. The plea of insanity as a defense for crime is often looked upon as a subterfuge; and, undoubtedly, this is occasionally so; but such cases, in my experience are rare. In great numbers of instances, the plea fails through a public mistrust of its genuineness, and insane persons are often sent to prison. There ought to be some way provided whereby the wrong thus inflicted could be corrected, and the patient transferred to the custody of an asylum for the insane.

We have mentioned that the insane are apt to commit assaults upon the person with intent to injure or to take life, and, in relation to this fact, we would say that insanity in life men is very prevalent. Out of all the life men in the prisons of the state of New York about twenty-three per cent. are inmates of the Matteawan State Hospital. We have also an extremely large number of convicted cases who are insane and whose offense was assault in the first degree. In many of these cases insanity was interposed as a plea at the time of their trial and failed. This is only mentioned to show the dangerous tendencies of the insane criminal.

Out of fifty convicts discharged from the Matteawan State Hospital during the past two years, only fourteen of the fifty were absolutely released; fifteen of the number died, and twenty-one were transferred to other state hospitals and to

homes in foreign countries, or to the custody of friends in this or other states. As a rule such patients, while under sentence, should not be transferred from the prisons to the custody of the ordinary hospital for the insane, but should be placed in a special institution for their care, and by the erection of such hospitals a benefit is conferred upon the prisons and an added safeguard given to the community. The asylum or hospital for insane criminals solves the problem of their treatment and care, and not the prison.

THE TREATMENT OF TYPHOID FEVER.*

BY DOUGLAS C. MORIARTA, M. D.,

Senior Surgeon, Saratoga Hospital, Saratoga Springs, N. Y.

Mr. President and Gentlemen of the Society:—

It is not my purpose to give you an exhaustive paper on typhoid fever, but rather deductions drawn from my clinical experience; hence of necessity the etiology and pathology can receive but little attention. My post-mortem experience has been limited to four instances, two of perforation and two where Peyer's patches and ulcerations were well marked. Neither have I a great number of cases upon which to base the clinical conclusions of this paper, yet such as they are I shall present them for your discussion.

At present our cases of typhoid are of unusual interest to us, because of the irregular symptoms presented by our soldier boys who spent the summer at Tampa and Fernandina. In '95 my wife had typhoid fever and at that time I had my first real clinical teaching with the disease, and it was then that I learned how to use water internally, thanks to Dr. Henry Hun. Since then I have seen nineteen cases of typhoid fever, five of which are of very recent occurrence among our soldier boys.

Some of the cases from which I have drawn my conclusions occurred prior to our knowledge of Widal's test; and in the more recent cases I have not had the material and so it has not been practicable to avail myself of its diagnostic value.

* Read before the Saratoga Medical Society, November, 1898.

Accordingly my diagnoses have been made on the characteristic temperature and tongue, the general malaise, anorexia, headache, diarrhœa, tenderness and gurgling in the ileo-cecal region, enlarged spleen and the roseate spots or eruption which appear early in the second week of the disease; this eruption is often quite general over the trunk and sometimes extends to the limbs. While all of the above symptoms have not been present in each case, the malaise, headache, characteristic temperature and tongue with the eruption were necessary to a conclusion. My later cases, occurring among the soldiers who were at Tampa and Fernandina, presented some unusual features. These cases had first well-marked malarial infection, i. e., paroxysms in which the chill and fever followed by a sweat occurred with an intermission of 24 or 48 hours. From this condition, four of the five soldiers convalesced and were taken down later with typhoid. Another feature of these cases was the very high temperature at the onset, with early delirium and extreme exhaustion. Three of the cases exhibited at the onset the usual dozen or more roseate spots, followed a few days later by a most profuse eruption which covered the entire trunk.

While several of my cases were troubled with constipation, all of the soldiers observed had excessive diarrhœa, not only frequent stools but very copious ones. Tympanites was not a prominent symptom; in only two cases was it troublesome, and both of these were when I saw the cases for the first time late in the disease, while the tenderness and pain in the bowels were not at all well-marked. In this connection it is worthy of note that prominent authorities mention that the pain or tenderness in the bowels is in no way a guide to the amount of ulceration or of the dangers of perforation or hemorrhage. All of the soldiers I have had an opportunity of observing had been in the southern climate and had been subjected to exposure and large doses of quinine. They exhibited a nervousness and a peculiarity of speech which I have never met before. In speaking a sentence they would omit the last word or a portion of it and the voice and rhythm were sharp and jerky in character; while they were conscious of the omission, it was impossible for them to control it. From these patients I could not obtain a history of having had a

typical malarial paroxysm, yet they all said they had high temperature and were given quinine in its full antiperiodic dosage. These symptoms promptly disappeared when quinine was taken away from them, and I cannot but conclude that large and frequent doses of quinine were given when the indications were not clear, as they were more than prophylactic doses.

One of the five soldiers came down with a thoroughly well-marked case of typhoid fever (which has since run its course) fifty-two days after he left the South, making an exceptionally long period of incubation; another case was about forty days before he came down. Whether there was a double infection and the malarial organism held the bacilli typhoides in abeyance or not, I do not know.

The complications which have occurred in my cases have been quite numerous. Three cases had extremely irritable stomachs, and it was with the greatest effort and care that I succeeded in nourishing them. In two cases there were sharp attacks of bronchitis; in only one case have I seen hemorrhage from the bowels, and this patient had nine of them. In another there was an appendicitis which occurred at the extreme end of the fever, after several relapses; this was so well-marked that there was no question concerning diagnosis, and arrangements were made for an operation; fortunately the symptoms subsided without this procedure. One case was complicated with small bed-sores which occurred with the most careful attention. Another patient has experienced profuse attacks of sweating on the right half of the body, while the left half remained absolutely dry. In four of my cases there have been involuntary evacuations from the bowels and bladder during the intensity of the condition; three of them have had persistent attacks of neuritis, associated with soreness in all the muscles. In only two of the cases has there been a relapse; by this I do not refer to the little set-backs occurring with elevation of temperature due to indiscretion in diet. One case had an impacted rectum and gave me no small amount of anxiety. Sordes and dry tongue I purpose mentioning as complications, for I believe if proper treatment be employed they will not occur. In perforations of the bowels, typhoid spine, contractures, gangrene, or perhaps better the surgical

aspect of the disease, I have had absolutely no experience, and can do no better than refer you to Dr. Keen's classical work on that branch of the subject.

The nourishment has generally been milk, either plain with lime water, or diluted with water, as best suited the individual; this has been varied with meat juice, and in some of the cases our resources have been taxed to the utmost. Peptonized milk, junket, malted milk, are sometimes tolerated by the stomach when plain milk is rejected. Animal broths are valuable but as a rule fresh meat juice is better. One patient refused everything but egg albumen on which he was sustained eleven days; another accepted ice-cream when everything else failed. I have found liquid beef peptonoids very useful in helping to sustain some of my patients.

The usual precautions have been given the family concerning linen and stools and the probable danger of infection to themselves and the community. With all of the various centers resulting from our soldiers returning to their homes sick with fever, it seems as if the streams and a great many people must be infected unless the greatest precautions are observed. I formerly used a solution of chloride of zinc, suggested by the State Board of Health, made by dissolving four ounces of commercial sulphate of zinc and eight ounces of common salt in a gallon of cold water; but latterly I have used a five per cent formaline solution, thinking it quicker and better. With the precautions to the family I believe we should observe two ourselves; first, we should wash our hands carefully after each examination of the patient; and second, we should not use with another patient the thermometer that has been used with a typhoid patient until it has been made clean in an alcoholic solution of bichloride. It is better to my mind to have a thermometer for each case of typhoid.

In the treatment we first give consideration to the selection of a room of proper size which can be ventilated, then to the nurse or nurses, and it is unnecessary for me to mention to you the value of competent, trained nursing. It means the saving of many a life which would otherwise be sacrificed, no matter who may be the attending physician. The directions to the nurse in reference to the boiling and care of the water which the patient will require are carefully and explicitly given.

I like to have a dozen quart spring-water bottles carefully cleaned and filled with water that has been boiled for thirty minutes, corked with cotton and placed to cool in the refrigerator or outside the window at this time of the year. I wish it were possible for me to convey to you who do not use water after the method of Dr. Henry Hun of Albany, the inestimable value of this one remedy, as well as to all physicians who must meet typhoid fever in the course of their regular practice. They may hear it talked about, or perhaps read about it and think they understand its value; but they will only appreciate its great usefulness when they have seen some one use it internally who has been taught the clinical lesson personally. Within a year I have heard physicians say that they gave their patients all the water they wanted; when asked how much, one reply was "one teaspoonful every twenty minutes," another "a pint in twenty-four hours," etc. But, gentlemen, if you wish to control the extremely high temperature, the nervous phenomena, the dry tongue and parched lips covered with sordes, have your nurse thoroughly understand that she must give the water exactly as directed. You will find as I do that it will take about three days, if it is their first case with such treatment, going over the subject twice a day with them, before they realize what you mean by giving the patient plenty of water. I say three days because it took me six to learn my lesson, under circumstances much more urgent than the ordinary case is to the average nurse. Let the tongue be the guide to the quantity required, and when it is dry increase the quantity until the tongue becomes moist and remains so, no matter how much it takes. Keep track of the quantity required and give the most minute attention to seeing that it is carefully prepared and as surely administered; and if the tongue remains dry, you may be sure water is not being given in sufficient quantity. Unless you have a competent nurse, other than a member of the family, this one requirement will be the hardest of all to manage; and I find even with trained nurses that they are like physicians who have not seen its clinical value demonstrated; they acquiesce in your directions and statements, but fail to execute your commands and so do not obtain the desired results until you force them because of the patient's poor condition. Do not

be surprised at the quantity of water required. Sometimes four quarts in twenty-four hours will suffice, while others will require very much more; in one of my cases four gallons were used daily for seventy-two hours, part of it by the rectum. I had one soldier boy who took three and one-half gallons of liquid (three quarts of milk being included) for nineteen consecutive days; another used two gallons and still another two and one-half gallons daily.*

Think, gentlemen, those of you who do not use water in such quantities, what it means to see a patient with a moist tongue, free from sordes and cracks during the most grave attack of typhoid. You may perhaps have two thoughts in mind concerning my experience in the use of water; first, were they genuine cases of typhoid, and, second, how is a patient to drink so much in twenty-four hours. As to the first I can assure you that I have had several very grave cases; as to the other point, if the patient is very ill the nurse can do little else but sit and give the patient water till his tongue moistens. With a little effort the nurse can give the patient a glass of water every ten or fifteen minutes if he has a temperature of 105 or 105½ until the tongue becomes moist, then less will suffice. In the case mentioned of three and one-half gallons daily for nineteen days, the patient had a glassful of water or milk every twenty minutes, night and day, awake or asleep; if asleep he would drop off again at once. When less was given his tongue would become dry and the delirium become more active.

The bath for reducing typhoid temperature I have never used; from the description of its good effects it is not unlike water internally. Cold sponging when well done is a serviceable means of reducing temperature and gives the patient much comfort; though since I have learned the value of water internally in controlling the dry tongue and nervous phenomena, I do not fear a temperature of 104 or 105. A temperature of 105 with plenty of water internally exhibits fewer nervous manifestations and less prostration than the same patient without water and a temperature of 102½; this is a clinical observation in a number of grave cases. Ice has

* Since writing this paper I have taken care of a case of typhoid running a severe course that had practically no medicament other than water, for a period of fourteen days she took an average of three gallons of water daily.

been of service to me when placed on the head, abdomen or perinæum; intestinal hemorrhage was relieved by lead and opium internally and ice on the abdomen and perinæum.

As little medicine should be employed in these cases as possible. I like to commence treatment with a full dose of calomel, ten grains in powder on the tongue, to be repeated during the fever as required, followed by a saline. In cases of constipation glycerine suppositories answer a very satisfactory purpose when calomel is contra-indicated; if the patient will not retain the glycerine suppository I have employed two ounces of water with one-half ounce of glycerine with good result. A full or high enema should not be employed because of the danger of perforation. Turpentine was employed as stupes for the tympanites and, formerly, after the suggestion of George B. Wood, internally in cases of severe nervous manifestations accompanied by the dry tongue and sordes; but since I have learned the value of water I have had no occasion for its use.

While many think but little of intestinal antiseptics, I have obtained positive results from capsules of carbonate of guaiacol, thymol, menthol and oil of eucalyptus in tympanites as it occurred in my cases treated with water; I have also tried with much satisfaction iodide of mercury, $\frac{1}{8}$ grain three times a day, in these cases. The name of the physician who suggested the latter remedy, I am unable to give you; I saw it in an article published by him in the Journal of the American Medical Association. In one case in which there was a very irritable stomach, insomnia and low delirium, sulphonal was suggested by an eminent consultant and proved so valuable that I wish to call your attention to it. We used it in five grain doses as occasion required after the first twenty-four hours. Strychnia, both alone and associated with digitalis, has done me great service several times in weak hearts; it is necessary in these cases when it is required to use full doses. Full doses of bismuth with cinnamon water did nicely for the diarrhœa; antipyretic remedies so-called I did not use at all.

Alcohol in some form is a useful and valuable remedy when indicated. It is most useful during the latter stage of the fever, but I believe it should be used when the heart flags, no matter what the temperature is or in what stage of the disease

we are; it is also a valuable remedy in meeting nervous manifestations. If used when the first sound of the heart becomes less marked, no error will be made I feel sure. The quantity must be an individual study and calls for close and careful observation as some patients require very much more than others. I believe whiskey to be the most generally satisfactory form, though occasionally champagne is the only one of the alcoholics the stomach will tolerate.

For neuritis and painful muscles, I have found that to inclose the member in cotton batting and oil silk resulted the most satisfactorily. Silver leaf is a very useful protection in commencing bedsores and will give quite the best results.

Of my nineteen cases, fifteen were adults, four children, and four of them were very grave cases; while the others were ordinarily sick, yet they did not represent the extremely critical type as did the severe ones mentioned. This series of nineteen cases have occurred in my practice since 1895 without a death, and they have had little medicine other than water.

In conclusion I wish to emphasize :—

(1) The value of water in sufficient quantities in high temperature.

(2) That the tongue is a guide to the quantity of water required; when the tongue is not moist then the patient is not having a sufficient quantity, no matter how much is being consumed.

(3) When the patient receives a sufficient quantity of water the nervous system is not so markedly disturbed.

(4) Watchfulness and determination is necessary in grave cases if the patient is to have sufficient water.

511 BROADWAY.

AN UNUSUAL INJURY TO THE KIDNEY.*

By W. D. GARLOCK, M. D.,

Little Falls, N. Y.

At about six o'clock P. M. of July 14, 1898, I was called to see G. B., a man thirty-eight years old, strong, healthy and temperate by nature, who had been injured while playing ball at a

* Read before the New York State Medical Society, January 31, 1899.

picnic that afternoon at about two o'clock. He was playing on third base and had been run into by a player running from second to third base. He had been struck with great force in his left side over the eleventh and twelfth ribs, and had been utterly prostrated, though not rendered unconscious by the blow. After lying on the ground a few minutes he was taken about a mile to a physician, who gave him a hypodermic of morphine and put two broad strips of adhesive plaster over the short ribs to limit the breathing. This gave him considerable, but not complete, relief. He was able to sit up and walked about a little, and managed to go to a hotel and wait two or three hours for a train to take him home. From the hotel he rode a half mile to the train, then rode ten miles on the cars to Little Falls and one-half mile from the station to his home, where I saw him at about six-thirty P. M.

I found him suffering from marked shock, pale, with moist skin and feeble, rapid pulse; temperature, 97° Fahr. He suffered considerable but not agonizing pain. He was perfectly conscious and gave me the history of the case previous to my seeing him. His pupils were contracted from the medication.

Examination showed no bruising or discoloration of the surface, though exquisite tenderness over the fractured eleventh and twelfth ribs and some tenderness over the left iliac region.

No tumor or dullness could be discovered. I questioned him as to having urinated. He said he had walked to the closet twice while on the train, once having a movement of the bowels and once for urination. He stated positively that the urine was clear and that he had no difficulty in either act. I hoped the intense shock was due to concussion of the abdomen with dilatation of the abdominal blood vessels and cautiously administered morphine to quiet his pain, leaving the adhesive straps in position.

Visiting him about three hours later I found his pulse and temperature better and a general improvement in feeling, but still pale and with moist skin. He was, of course, kept as quiet as possible. Early the next morning I found he had passed a restless night and had also passed bloody urine.

I asked him if he had not been mistaken when he told me his urine was clear after the accident. He then said that he had

passed a little blood shortly after the accident, but after that had passed clear urine and had forgotten when he told me.

Careful examination at this time showed slight resistance to palpitation over the left kidney and some dullness, also tympany of the abdomen, with increased tenderness. Shock still present. I urged consultation with an abdominal surgeon, but he and his family hesitated. Seeing him again in a couple of hours, I insisted on a consultation, and Dr. J. G. Kilburn, of Utica, was called to operate the case, and he saw the case with me at about four o'clock P. M. about twenty-six hours after the injury.

At this time abdominal distension and tenderness were more marked, general symptoms of shock still much in evidence, with signs of a growing tumor in the left kidney region. A little bloody urine had recently been passed.

Operation was advised and consented to, and as all preliminary arrangements had been made, the patient was soon on the table and operation begun by Dr. Kilburn.

On opening the abdomen signs of peritonitis were immediately found, with blood in small quantity in the peritoneal cavity. The omentum was torn across horizontally and the separated part was exsanguinated and shriveled up. The abdominal cavity was cleansed and examined, and over the left kidney a subperitoneal Hæmatoma was found. It was thought best to cut down upon the kidney posteriorly, and in doing this a large amount of partly clotted blood was turned out and the kidney found so badly lacerated that it was removed as quickly as possible. You will see by the specimen how badly it was injured. But little of this laceration was done in removal, but was almost entirely due to the accident on the ball field. The patient never regained consciousness after the operation, but died at about nine o'clock, three hours after removal from the table.

I have been unable to find time to look up similar injuries, but will refer to one somewhat similar reported by Dr. A. C. Bernays, of St. Louis (vol. II, *Sixth Series, International Clinics*), in which a man, twenty-three years of age, fell from the driver's seat of a cab, striking the hind wheel with his right side in such a manner that the whole force of the blow came over the short ribs of the right side. Symptoms similar to those now reported were found, and operation showed the kidney to be lacerated

transversely in several places, and entirely separated from its vascular connections, so that it was removed without the use of ligatures on any blood vessels. Dr. Bernays made a study of the anatomical relations of the kidney short ribs and transverse processes of the lumbar vertebræ, and concluded that the kidney being forcibly driven against these bony structures explained the peculiar injury found. The specimen in both these cases showed transverse lacerations and in both cases the patient passed clear urine subsequent to the injury, this clear urine of course coming from the sound kidney on the other side. In both cases the injury was so severe that the ureter was occluded. Both cases were operated at about twenty-six hours after the injury. Dr. Benays' case recovered, the kidney lesion being the only injury of moment. In our case death resulted, there being a laceration of the omentum and peritonitis complicating.

A FORM OF SUTURE SUITABLE FOR ABDOMINAL SURGERY.*

By R. J. WILDING, M. D.,

Malone, N. Y.

The science of surgery, together with those of physiology and pathology, have made such rapid strides during the latter part of this century, that they have enabled the art of surgery to be brought to such a degree of perfection that the attention of surgeons at the present time is largely occupied in improving its technique and in the consideration of such matters as formerly hardly cost the older surgeons a thought. Such being the case, it will perhaps not be out of place to occupy a few moments of the time of the society by a brief consideration of the various materials most commonly used for sutures, and also to describe a form of suture which I have found useful in cases in which buried sutures are commonly used, those where the surgeon has to deal with various planes of tissue, as in many cases of abdominal section. It is not my intention to take up your time with a long dissertation on the merits and demerits of the various materials used for sutures, but I shall merely glance at the advantages and disadvantages of a few of the more commonly

* Read before the Medical Society of the State of New York, February 2, 1899.

used substances, such as silver wire, catgut, silk-worm gut, kangaroo tendon, and silk. Silver wire, while a valuable suture in certain cases, as it is so easily sterilized and can be used as a sort of splint to the parts, is nevertheless, owing to its rigidity, not suitable for the ordinary run of surgical work, more particularly if it is necessary to use a buried suture, as it must become encysted, and is in many cases a cause of after-irritation and trouble. Catgut would doubtless be an ideal suture providing one could only be sure it could be thoroughly sterilized. I am aware that many of our best surgeons are using it extensively and report excellent results from its use. On the other hand, we hear of many untoward accidents in cases where it has been used. For my own part, I never feel really easy as to the outcome of an important case where I have depended upon it, and feel sure that many cases of septic poisoning can be traced to it. Silk-worm gut is certainly in many cases a very useful and valuable suture, but is open to many of the objections which have restricted the use of the metallic suture, owing to its rigidity, which interferes with its use for buried sutures. Kangaroo tendon I have not used sufficiently often to feel like expressing any opinion as to its merits. It appears to me that in properly sterilized pure silk we possess a suture which will as a rule give good results and which has fewer disadvantages than any other material that I have used. It is pliable, easily manipulated, unirritating, and is absorbed so slowly as to ensure a perfect union of the parts it is used to secure. I am aware that silk is commonly spoken of as a substance which becomes encapsulated and is not apt to be absorbed. Such has not been my experience with it. Pure silk properly sterilized I find is usually absorbed in from four to five weeks' time. For buried sutures such as are being used so frequently at present to unite the various planes of tissue in abdominal surgery, I think it leaves little to be desired. As, however, it does not seem desirable to leave any foreign matter in the tissues longer than is absolutely requisite to secure a perfect union of the sutured parts, I have been using of late a form of suture which I shall now describe, which, while it is a buried suture, can easily be taken away whenever the surgeon desires to do so. My method of using it is as follows, viz.:

A piece of properly prepared silk, long enough to suture a wound of at least double the length one has to deal with, is threaded to a needle at each end. The two needles are then passed through the skin and tissues a short distance from each other, about half an inch external to one angle of the wound, and are caused to emerge just external to the plane of tissue it is desired to unite. The layer of tissue is then brought together, handling the two ends of the suture exactly as a double shoe lace, with the difference that the punctures made by the two needles are not placed opposite one another, but alternately, the result being a double continuous suture, the threads of each being very slanting. The end of the wound being reached, the needles are plunged into the tissues and brought out through the skin a short distance from one another and about half an inch from the angle of the wound. The edges of the tissues can then be perfectly coaptated, the sutures drawn as tight as seems necessary to ensure perfect apposition, and are then tied together over the bridge of skin separating the needles. Whenever it is desired to take out the suture it is merely necessary to cut off one of the external loops of silk, first drawing on it a little, so as to be sure to cut the silk a little below the surface, where it is moist, when by making traction on the loop at the other end of the wound it can be easily withdrawn. The moisture in the silk makes it very pliable and the slanting manner in which it passes through the tissues causes it to offer a very slight resistance and to pull easily. To recapitulate, the advantages claimed for this kind of suture are ease in introduction, perfect apposition, and after security of the parts sutured, freedom from sepsis, and the facility of its withdrawal.

MEDICAL EDUCATION: ITS RELATION TO CLASSICAL LITERATURE.*

By C. DE LA MONTANYE, M. D.,

Port Ewen, N. Y.

The object of this paper is to show that the inspiration derived from a medical education was the source that gave us some of the world's greatest classical literature; also to point out some

* Read before the Medical Society of the State of New York, February 1, 1899.

of the great masterpieces produced by poets, scientists, and novelists who had received a medical training and some of whom were successful practitioners of medicine and surgery.

I wish to name a few of these authors and quote a few passages from their works which will demonstrate that without this preparatory education as physicians their works would have lacked the power that gave them their wide recognition as literary masterpieces. In the literary work of physicians there can be traced that knowledge, which comes from the psychological, physiological, and anatomical study of the human mind and body.

How much Darwin and Huxley, Holmes and Holland, Mitchell and Doyle and many others were aided by their preliminary medical education in their writings, we will attempt to point out as far as possible in this brief paper. Review with me first some of the writers of our own generation and country, such as Holmes and Holland. Who but a physician could write a physiological and psychological work like "Elsie Venner," one of Oliver Wendell Holmes's masterpieces? This is a study in heredity. Elsie Venner, described as a victim of a prenatal casualty, is the work of a physiologist such as Holmes pre-eminently was. It is not to Poet Holmes or Novelist Holmes that we are indebted for this great study of humanity, but to *Doctor* Holmes.

Now let us glance at his poem the "Wonderful One Hoss Shay." See how he dissects that wonderful piece of mechanism. Each part is named and described as if he were talking to a class of medical students with a human skeleton before him as the subject of his lecture, when he says:

"Now in building chaises I tell you what
There is always somewhere a weakest spot,"

just as if he were describing some weak spot in the human body. Then again:

"A general flavor of mild decay,
But nothing local as one can say,"

is as good a description of old age as was ever put in print in so few words.

In the works of J. G. Holland we can discern the hand of the physician, who portrays humanity as he finds it as a practical man. The most beautiful parts of "Bittersweet," his great

didactic poem, are those which only a physician, with his knowledge of human sympathies, could write. For instance, the following lines from the "Cradle Song" will suffice to show this markedly:

"Who can tell what a baby thinks?
Who can follow the gossamer links
By which the manikin feels his way
Out from the shore of the great unknown
Blind and wailing and alone
Into the light of day?"

Again, this couplet:

"Hearts, like apples, are hard and sour
Till crushed by pain's resistless power,"

another passage from "Bittersweet" showing his knowledge of the effect of pain upon the nerve centers.

Rabelais, the great French satirist, was a most noted physician for the age in which he lived, and yet he found time to write the greatest satires ever written in any language.

The best parts and the greatest passages of "Gargantua and Pantagruel" came into existence because of their author's knowledge of midwifery and of the care and habits of children as a practical physician. I will quote a few lines from this author to bring out these points:

"Gargantua from three years to five was nourished and instructed in all proper discipline by the commandment of his father, and spent that time like other children; that is, in drinking, eating and sleeping, in eating, sleeping and drinking, and in sleeping, drinking and eating."

This, although written four hundred years ago, is the best short description of the manner in which a child spends its time the first few months of its existence. In this next passage I quote, see what a knowledge of children he possesses, and notice at the same time the most sublime humor:

"Still he wallowed in the mire, blackened his face, trod down his shoes at the heel. He sharpened his teeth with a slipper, washed his hands with his broth, combed his hair with a bowl, drank while eating his soup, would bite in laughing, laugh in biting, hide himself in the water for fear of rain," etc.

No one could give such a description of the manners of a child unless he was brought daily in contact with childhood as a successful physician is called upon to do.

John Brown, who gave us those two great English classics of "Rab" and "Pet Marjorie," was a noted Scotch physician. The most brilliant parts of these two works are inspired by his knowledge of hospital surroundings and work, and by his keen insight into human suffering in sickness and death-bed scenes, the descriptions of which have never been surpassed, and many a heart is sore to-day for "Marjorie," one of his heroines, the ten-year-old child who died in Scotland a hundred years ago, from the death-bed scene he describes so vividly and pathetically.

Charles R. Darwin, the author of the Darwinian theory (which is accepted by all scholars and thinkers of these times), received a medical education, and without this preliminary mental training much of his "Origin of Species" and "Descent of Man" would not have been so satisfactorily written and understood. To have written these great scientific works required a vast knowledge of anatomy and physiology. His "Evidences of the Descent of Man" consists of minute inferential proofs of similarity of structure between man and the lower animals, more markedly shown in the embryonic stages, and, taken with the existence of man and various rudimentary organs, implies that man and the lower animals came from a common ancestor. This is evident in all, that the mental development to write such a work must be largely such as a physician and surgeon must possess.

The writings of Huxley, who was also a physician, were along the same line as those of Darwin. The literary fame which he gained was the inspirations of a scientific physician. His educational works, "Anatomy of Invertebrate Animals," "Anatomy of Vertebrated Animals" and "Lessons in Physiology," he acknowledges were written only through the insight he obtained in his medical studies several years previous.

Both Charles Lever and George Henry Lewes were physicians, and without quoting anything from their writings, I will say that Lever's masterpiece, "Charles O'Malley," and Lewes's "Physiology of Common Life," are unmistakably the writings of medical men. There is a vast amount of proof that the original singer of the Iliad, the world's greatest epic, was a

physician. But not wishing to tire you with numerous quotations, I will call your attention to only two points which define this clearly. In the first book of the Iliad, the description of the plague sent upon the Greeks by Apollo is by one who has made a close study of human misery. Next I will show to you that Homer had a good understanding of anatomy, and in his description of death wounds of the spear and other weapons he is most anatomically correct as to the parts of the body in which a wound would be immediately fatal. When Homer permits one of his heroes as Hector or Achilles to inflict a mortal wound, he does it in such a manner that not even with our great advance in modern surgery could we have stopped death's progress. The following passages from the Iliad will convey this thought very clearly:

"The weapon entered close above the ear,
Cold through his temple glides the whizzing spear,
With piercing shrieks the youth resigns his breath,
His eyeballs darken with the shades of death."

Again another:

"The foe rushed furious as he pants for breath,
And through the navel drove the pointed death,
His gushing entrails smoked upon the ground,
And the warm life came issuing from the wound."

In a wound as this just described our abdominal surgeons would have found a rather discouraging case for laparotomy. Once more see the fatal wound:

"The impatient steel with full descending sway
Forced through his brazen helm its furious way,
Resistless drove the battered skull before,
And dashed and mangled all the brains with gore."

These, with many dozen more instances I might give, and never once does Homer make an anatomical error, but always finds the fatal spot to give the death wound.

To draw my paper to a close I will mention a few other physicians who have added to the world's classics. I will merely mention their names, not speaking of any of their writings:

Paul Fleming, Conan Doyle, W. D. Draper, Mark Akinside, Sir Thomas Brown, S. Weir Mitchell, W. G. Palgrave, and many others.

But this is sufficient to show that some of the world's greatest poets, novelists, satirists and scientific writers were physicians. This, with what physicians have done for suffering humanity in both medicine and surgery, makes them greater benefactors to men than any other one class of the human race.

Correspondence

MUNICH LETTER

MUNICH, BAVARIA, *May 24, 1899.*

The hospitals in Munich are not provided with ambulances. This need is supplied by a society called "Sanitätswache Rothes Kreuz," which has a number of ambulances and trained attendants stationed in different parts of the city. These attendants are especially instructed in giving "first aid to the injured," and wear a neat uniform with a white band around the right arm containing a large red cross and their caps are also ornamented with this same emblem of mercy. Every Friday evening they hold a "Kneipe" and are addressed by some one of the doctors who comprise the corps of instructors. No physician accompanies these ambulances but the attendants are allowed to administer simple restoratives. The ambulances are very crude and plain when compared to the well-equipped ones with pneumatic tires we see in the United States. When an accident occurs a telephone message is sent to the nearest station where as frequently happens there is no ambulance. The drivers are very fond of driving around in order to exercise the horses. After an interval of from a half hour to three hours the ambulance may arrive on the scene driven in a most deliberate manner. They are not given the right of way over here nor are they provided with awe-inspiring gongs. The patient will be taken to a hospital or to his home if his address is known. This method does away with any hospital rivalry in reaching and capturing accident cases and it certainly does not expose the pedestrian public to the dangers of our rapidly driven ambulances. The hospital interne in Germany does not know what he misses in the way of being seen and admired by the sympathetic crowd which is always

in evidence on such occasions. He is on the other hand fortunately spared from the humiliation and embarrassment of a mistaken diagnosis if he finds the patient in a comatose condition.

They have a few "bicycle" ambulances which shows a tendency to keep up with the times. These are constructed on the same general plan as the bicycles used to deliver goods and which have two wheels behind. A covered stretcher large enough to comfortably hold one person is supported on the two wheels and the attendant sits in front of it and propels the vehicle. I saw one not long ago and it seemed a rapid, comfortable and economical way of transporting invalids. This society is supported by voluntary subscriptions and it does good work. Its agents will transport invalids and patients to and from the hospitals, trains and private dwellings and the friends pay only what they can afford.

Professor Maragliano, of Genoa, has an article in the *Centralblatt für innere Medizin*, May 13, 1899, on the role of the staphylococcus in chorea rheumatica. After defining chorea and naming its clinical divisions he goes on to give statistics from Osler, Oxley and Starr, showing the great frequency of rheumatism and heart affections in chorea. He claims acute articular rheumatism has been shown to be an infectious disease and attended with the presence of staphylococci and streptococci. This led him to investigate chorea with this fact in mind and he arrived at the following conclusions: that chorea rheumatica is an infectious process and is attended with the presence of different microorganisms which cause the manifestations of the disease either by their own action on the nervous system or through that of the toxins; that staphylococci play the chief part in the infection and were found twice as frequently as any other variety of bacteria. I have seen two cases of chorea lately in the children's polyclinic both with well marked mitral regurgitation. Epidemics of this disorder are by no means rare and have always been ascribed to mimicry. It is hoped that further investigations will be made along this line.

An interesting therapeutic suggestion was given by Professor Escherich, of Graz, in his remarks on the paper read by Dr. Riegel at the recent congress for internal medicine. Dr.

Riegel spoke on the influence of drugs on the stomach secretions and showed by his experiments that atropin diminished the secretions of the stomach and intestines very perceptibly, while pilocarpin augmented them. Professor Escherich said that for over a year he had employed atropin in the diarrhœa of children with good results and had observed its influence in checking the secretions. He had been very careful in his dosage and had had no bad effects from the drug.

It will surprise many no doubt to know that the children in the public schools of Munich are obliged to bathe in the school once a week. A visit to the large new school at Schwabing would well repay one. They have 1,100 pupils and the method of bathing is excellent. The bath room is quite large and two long shallow troughs about two feet wide, containing water, extend down the middle of the room. On each side of the troughs are benches and overhead are sprays regulated and controlled by one person. The children march into the room in true military order—for everything is done in a military manner over here—and are given a small piece of soap, towel and a strip of cloth to cover the loins. When they are stripped they go to the troughs, sit on the benches, and wash their feet. This delicate operation completed, they stand up and receive a spray bath, warm at first but gradually becoming colder. They rub themselves down well and after dressing march out again. During the bath they are remarkably quiet in comparison to the noise an equal number of American boys would make in a like situation.

There is quite a strong movement in Germany to educate the masses in this branch of personal hygiene. They certainly have gone about it in the right way in having the public schools adopt a compulsory bathing system and train the children in the way they should "wash." The German society for promoting public baths held a meeting in Berlin last month. Dr. Rubner, professor of hygiene in the University of Berlin, spoke on the Hygienic Importance of Public Baths; Major Hoffman and Admiral Hollman explained the bathing methods employed in the army and navy respectively.

One cannot but notice the large number of articles in the current medical literature in Germany relating to pulmonary

tuberculosis. Perhaps this is stimulated by the congress for the prevention of tuberculosis which is now in session in Berlin. That the present agitation is important cannot be denied. A disease which now affects nearly one million and a quarter of the people in Germany alone and which is responsible for nearly a quarter of a million of deaths annually in the German empire should be very closely investigated. A large number of writers are strongly in favor of public sanatoriums and claim thousands of lives would be saved thereby each year. In this connection the report of Dr. Turban, director of a private sanatorium at Davos, is instructive. His report covers seven years and the figures are gathered from observations made of the patients one to seven years after their discharge. In a light grade of the disease where the bacilli have been found and only a small portion of the lungs affected he gives the surprising result of 97.5 per cent. of recoveries. In the second grade 54.6 per cent, and in the third grade where large portions of the lungs were involved 17.4 per cent. This sanatorium is situated in a high altitude and the line of treatment employed was the lung exercise from breathing the pure rarified air and the hospital life and discipline.

Professor Seitz, the director of the children's polyclinic has had great success in the angina of scarlet fever by inserting carbolic acid directly in the tonsils. This treatment was first suggested by Heubner, of Leipzig, and I had an opportunity to see it applied only a few days ago. A child about four years old came to the clinic with the characteristic rash and fever of scarlet fever and with enlarged and tender tonsils. This is due to a secondary streptococcus infection and the general mode of treatment, using antiseptic washes, is not effective, as only the surface can be reached. A small syringe with a long needle is filled with a three per cent. solution of carbolic acid and a few drops injected in several places on both sides. The needle is made with a shoulder about $\frac{1}{8}$ inch from the point so that it cannot be inserted too deeply and injure the vessels of the neck. The procedure is not painful. In the case I saw the little patient struggled and cried lustily before and during the operation but less than a minute after was laughing over a piece of chocolate given by the professor, so there could not have been much pain,

although the operation looks rather formidable. Dr. Seitz has used these injections in very many cases and has never seen carbolic acid intoxication resulting from their use. The temperature soon lowers and there is an improvement in the general condition. He continues the injections so long as the tonsils are enlarged and there is high fever. This treatment has been tried in diphtheria but without much success and it seems only serviceable in the angina of scarlet fever.

Dr. Klein, whose article on ventral and vaginal fixation of the uterus appears in this number of the ANNALS, has been well introduced to the readers of the ANNALS by Dr. Edgar A. Vander Veer in his recent letter on gynecology in Munich. Dr. Klein is to read a paper on the development of the vagina, uterus and appendages before the German Gynecological Congress now being held in Berlin.

H. L. K. SHAW.

Editorial

A Cortical Centre for Writing.

It has long been supposed that a distinct centre for writing existed in the cerebral cortex, but there has been no better proof of its existence than the presumptive evidence offered by two cases reported by Charcot and Dutil. These cases were complicated and it was necessary in order to sustain the belief in this separate centre to assume certain functions for different parts of a more or less extensive area of brain involved in disease. Numerous cases of motor aphasia without agraphia have been reported, in which the lesion has been limited to Broca's convolution, and there are also in the literature many instances of combined agraphia and motor aphasia in which both Broca's convolution and the adjacent base of the second frontal convolution have been involved. These facts have justified the inferential belief in a separate centre for agraphia in the last-mentioned locality, but the direct and incontrovertible proof afforded by a clinical case has until recently been wanting.

In the *American Journal of the Medical Sciences* for May, 1899, Dr. Gordinier reports a case of tumor of the base of the second left frontal convolution in which the only symptom

was uncomplicated and pure agraphia, and in which the lesion except for some terminal extension which shortly preceded death, was a glioma occupying the foot of the second left frontal convolution, and distinctly separated from the arm area by the precentral sulcus, which was, in this case, well developed. This tumor was found, on section, to extend downward and inward in the centrum semi-ovale as far as the roof of the anterior cornu of the lateral ventricle, and forward to near the apex of the frontal lobe, involving almost exclusively the white matter of the second frontal gyrus. The left third or inferior frontal convolution was found throughout its whole extent perfectly normal as was its associated centrum ovale.

The case reported by Dr. Gordinier stands alone in medical literature and seems to prove conclusively the existence of a separate and distinct centre for writing, having the same relation to writing movements, as the motor speech centre has to speech movements, and destruction of this centre produces pure motor agraphia without aphasia, and with no paralysis of the arm.

The Christian Scientists. We are gratified to see that there is a well-formed and aggressive movement in this State to suppress the evils of the so-called "faith-cure."

Michael C. Murphy, President of the Board of Health of Greater New York, has sent a letter to the superintendent of the Sanitary Department, requesting him to obtain the names of all persons practicing medicine without a diploma, and to act in connection with the county societies of the several counties comprising Greater New York in prosecuting them. Christian Scientists and all faith-curists are included; in fact, the order is issued to reach them especially, while, at the same time, it reaches other faddists, such as osteopaths.

Numerous attempts have been made to indict "healers by faith" for manslaughter, but there is not a record of a single indictment obtained against them followed by the proper punishment. The course pursued at present — to indict for the illegal practice of medicine — is practical, and should be effectual. The fact cannot be gotten around, that they practice medicine. According to Dunglison, medicine is "a science, the object of which is the cure of disease and the preservation of health,"

and the practice of medicine is the exercise of that science and embraces *all* that pertains to the knowledge, prevention and *cure* of disease. It is, therefore, obvious that the practices of the Christian Scientists bring them within the class of practitioners of medicine no matter how delusive their methods may be, and as members of that class, according to definition and law, they should be compelled to comply with the laws governing the practice of medicine, or prosecuted for practicing that science illegally.

In Memoriam

HENRY S. CASE, M. D.

The recent death of Dr. Case calls to mind one who, while not of later time seen at the meetings of our County Medical Society, because chiefly of the condition of his health, was for many years a familiar and welcome figure. He was a man of genial nature and an agreeable and instructive associate. He was a son of a physician, Dr. Jonathan H. Case, who practiced medicine here in Albany for some thirty-five years and was an active member of the profession to the time of his death in 1865.

His son followed him in professional work, graduating from the Albany Medical College in 1853, and prosecuting his calling in the part of the city and the office long occupied by his father. He united with the County Medical Society in 1853, and was a delegate to the State Society 1876-80. He filled with credit for years the office of district physician, and his life has always been characterized by faithful and conscientious service wherever it has been cast. His death, June 14, 1899, after a considerable period of practically being laid aside by bodily infirmity, ends a career that during many years had much in it most worthy of emulation.

F. C. C.

Medical News

Edited by H. Judson Lipes, M. D.

OFFICERS OF THE CLIMATOLOGICAL ASSOCIATION.—At the recent meeting of this Association held in New York, the following officers were elected for the ensuing year: President, Dr. Abraham Jacobi, of New York city;

Vice-Presidents, Drs. R. H. Babcock, of Chicago, and J. W. Brannan, of New York city; Secretary and Treasurer, Dr. Guy Hinsdale, of Philadelphia; representatives to the Executive Committee of the Congress of American Physicians and Surgeons, Dr. Frederick I. Knight, of Boston, and Dr. Roland G. Curtin, of Philadelphia. The next meeting of the Association will be held at Washington, D. C., during May, 1900.

HARVARD'S MEDICAL TEACHING.—Plans are well matured for the creation of a college of comparative medicine at the Harvard University, an institution which will promote research work on original lines and with which the different medical departments of the University—the Harvard Medical School, the Harvard Veterinary School and the Harvard Dental College—are to be co-ordinated. Three hundred thousand dollars has been set aside for the erection and the maintenance of a laboratory to be named after the late Henry L. Pierce. Six hundred thousand dollars additional will be required. It is proposed that the new college shall give the same facilities for research as the Pasteur Institute of Paris, the Jenner Institute of London and the Institute of Hygiene at Berlin.

MEDICAL SOCIETY OF THE COUNTY OF ST. LAWRENCE.—The annual meeting of the Medical Society of the County of St. Lawrence was held at the St. Lawrence Inn, Gouverneur, N. Y., May 16, 1899. The president's address was had before dinner, after which the business of the body was done and the remainder of the program carried out as follows: President's annual address, D. M. Taylor, Edwards; "Some Thoughts on the Cause and Prevention of Insanity," William Mabon, Ogdensburg; "The Eliminative and Antiseptic Treatment of Typhoid Fever," Sidney D. Wilgus, Ogdensburg; "A Case of Cholera Infantum," with remarks, Lucius B. Baker, Russell; "Uterine Fibroids" and "Laceration of Perineum," H. Kay Kerr, Hammond; "Intussusception of Bowel in Infancy," E. H. Bridges, Ogdensburg; "Biographical Sketch of the late Dr. A. C. Drury," Lucia E. Heaton, Canton. The doctors were regaled with a collation in the best style of the Inn. The papers and discussions were of a high order and listened to with marked attention and appreciation. The officers elect are: President, Dr. Babcock, of State Hospital; Vice-President, Dr. Fuller, of Spragueville; Secretary, Dr. Close, of Gouverneur; Treasurer, Dr. Raymond; Treasurer *pro tem.*, Dr. Brownlow, of Ogdensburg; Censors, Drs. Reynolds, of Potsdam, and Mabon, of Ogdensburg State Hospital.

NEW ST. VINCENT'S HOSPITAL.—The new free hospital for the destitute sick, which has been built as an addition to the St. Vincent's Hospital, at Seventh avenue and Eleventh street, New York city, was formerly opened and blessed by Archbishop Corrigan on May 30th. The hospital can accommodate at one time 1,100 patients. The new building is seven stories high and has a frontage on Eleventh street of 145 feet. It is fire-proof throughout and is so arranged as to afford plenty of light and pure air. This end is secured by a spacious roof garden and by the arrangement of an interior court yard, in which are a lawn, a large fountain, and a number of trees. The medical ward and the gynecological department

was furnished throughout by Dr. and Mrs. F. S. Dennis. An x-ray apparatus was provided by Mr. John D. Crimmins. The building will be entirely devoted to free patients. On the first floor will be a dispensary and a reception room for ambulance cases. On the second floor there will be children's wards. In the remainder of the building there will be six wards for men and three wards for women.

THE AMERICAN PROCTOLOGICAL SOCIETY.—This Society was organized at Columbus, Ohio, on June 8th. Its purpose is to study the diseases of the lower intestine. Among its members are prominent specialists in the leading cities of the United States. Dr. Joseph M. Matthews, of Louisville, Ky., the retiring president of the American Medical Association, was elected president, and Dr. James P. Tuttle, of New York city, vice-president.

THE AMERICAN MEDICAL ASSOCIATION.—Fifth annual meeting held at Columbus, Ohio, June 6, 7, 8 and 9, 1899. The general session was held in the Grand Opera House. The Association was called together by the president, and after the opening prayer by Rev. Washington Gladden, of Columbus, the address of welcome was delivered by His Excellency, Governor Asa S. Bushnell. The Association was also welcomed to Columbus by His Honor, Mayor Samuel J. Swartz. The president's address was then delivered by Dr. Jas. M. Matthews, of Louisville, Ky. The report of the chairman of the Rush Monument Committee was read by Dr. Henry D. Holton of Brattleboro, Vt., in the absence of Dr. Gihon. He read that of the \$100,000 which was fixed by common consent at the meeting of the Association at Philadelphia, as the amount which should be contributed by the profession to erect a suitable memorial, the sum actually in the treasurer's hands is about \$10,582.02. The selected site is in the beautiful park fronting the United States Naval Museum of Hygiene.

Many interesting papers were read by prominent members of the profession. The officers for the ensuing year are as follows: President, Dr. W. W. Keen of Philadelphia, Pa.; First Vice-President, Dr. Charles A. Wheaton of Minneapolis, Minn.; Second Vice-President, Dr. E. D. Ferguson of Troy, N. Y.; Third Vice-President, Dr. J. M. Allen of Liberty, Mo.; Fourth Vice-President, Dr. W. D. Middleton of Davenport, Iowa; Treasurer, Dr. Henry Newman of Chicago, Ill.; Secretary, Dr. George A. Simmons, editor Journal of the American Medical Association, Chicago; Librarian, Dr. George W. Webster of Chicago; Chairman of Committee of Arrangements, Dr. Philip Marvell of Atlantic City, N. J.; Trustees of the Journal of the American Medical Association, Dr. E. E. Montgomery of Philadelphia, Pa., Dr. H. L. E. Johnston of Washington, D. C., Dr. C. C. S. Reed of Cincinnati; Journal Council, Dr. J. W. Griffith of Kansas City, Mo., Dr. J. E. Cook of Cleveland, Ohio, Dr. J. H. Baillache of Washington, D. C., Dr. J. B. Lewis of Topeka, Kan., Dr. F. H. Wiggin of New York City, N. Y.; Address on General Medicine at the next meeting of the Association, Dr. J. A. Witherspoon of Nashville, Tenn.; on Surgery, Dr. W. L. Rodman of Philadelphia, Pa.; on State Medicine, Dr. Victor C. Vaughn of Ann Arbor, Mich. The place of meeting next year will be Atlantic City, N. J.

THE WILLIAM F. JENKS MEMORIAL PRIZE. — The fifth triennial prize of five hundred dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Various Manifestations of Lithæmia in Infancy and Childhood, with the Etiology and Treatment." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may, in their judgment, be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia."

The prize is open for competition to the whole world, but the essay must be the production of a single person.

The essay, which must be written in the English language, or if in a foreign language, accompanied by an English translation, must be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., before January 1, 1901, addressed to Richard C. Norris, M. D., chairman of the William F. Jenks prize committee.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

JAMES V. INGHAM, M. D.,

June 15, 1899.

Secretary of the Trustees.

THIRD INTERNATIONAL CONGRESS FOR GYNÆCOLOGY AND OBSTETRICS.— The third International Congress for Gynecology and Obstetrics takes place at Amsterdam, from the 8th to the 12th of August, 1899, under the patronage of the Minister of the Interior. The leading questions for discussion will be: 1st. The surgical treatment of fibro-myoma. 2d. The relative value of antiseptics and improved technic for the actual results in gynæcological surgery. 3d. The influence of posture on the form and dimensions of the pelvis. 4th. The indications for Cæsarian section compared to that for symphyseotomy, craniotomy and premature induction of labor. MM. Doyen, Howard Kelly and Schauta will treat the first question; MM. Bumm, Richelot and Lawson Tait the second; MM. Bonnaire, Pinzani and Walcher the third, and MM. Leopold, Pinard, Pestalozza and Fancourt Barnes the fourth. As regards private communications, preference will be given to those bearing upon the above men-

tioned leading questions. Time will also be allowed sufficient for any demonstrations kindly afforded by the members. The official languages are: English, French, German and Italian. Address all communications to

J. D. EMMET, M. D., Secretary for America.

91 Madison avenue, New York, N. Y.

THE LEUVAL PRIZE.—This prize, consisting of the interest of 3,000 francs (\$600), which has accumulated between one international otological congress and the next, was founded by Baron Leon de Leuval, of Nice, and will be awarded at the next meeting of the congress, to be held in London, August 8-11, 1899. It will be presented to the author of the most marked progress bearing on the practical treatment of affections of the ear, or to the inventor of any new apparatus which is readily portable and improves considerably the hearing power of deaf persons. All persons desiring to compete for the prize are requested to communicate without delay with Mr. Creswell Baber, 46 Brunswick Square, Brighton, England, stating the facts on which their applications are based.

LONG ISLAND COLLEGE HOSPITAL.—There has been a number of changes made in the teaching force of this college. Professor A. J. C. Skene, M. D., has been appointed emeritus professor of gynaecology. The chairs of obstetrics and gynaecology have been combined, under Professor Charles Jewett, M. D. The department of bacteriology has been added to that of pathology, under Professor J. M. Van Cott, M. D. The department of histology has been assigned to Professor W. W. Browning, M. D., of the chair of anatomy. The following appointments have been made: Henry H. Morton, M. D., clinical professor of genito-urinary diseases; Robert L. Dickinson, M. D., assistant professor of obstetrics; Gordon R. Hall, M. D., assistant professor of the practice of medicine; George McNaughton, M. D., and Ernest Palmer, M. D., lecturers on gynæcology; Wilbur H. Seymour, M. D., lecturer on histology and instructor of pathology; C. E. Gunther, M. D., instructor in clinical medicine; Clarence R. Hyde, M. D., H. P. de Forest, M. D., and Jarvis S. Wight, jr., M. D., instructors in the obstetric manikin; Homer E. Fraser, M. D., assistant to the chair of genito-urinary diseases; Briton H. Richardson, M. D., assistant to the chair of anatomy; Walter Truslow, M. D., William S. Hubbard, M. D., and Joseph O. Kilgariff, M. D., assistants to the chair of orthopædics; John C. Cardwell, M. D., demonstrator of physiology; and Sewell Matheson, M. D., and Daniel C. Mangan, M. D., assistants to the chair of chemistry and toxicology.

DR. FREDERIC S. DENNIS HONORED.—Dr. Dennis, of New York, enjoys the distinction of being the first American physician to be honored by having conferred upon him the degree and title of Fellow of the Royal College of Surgeons of England. To be eligible to this honorary degree a man must be a graduate of the college of twenty years' standing; only two are chosen each year.

OFFICERS OF THE ASSOCIATION OF AMERICAN PHYSICIANS FOR 1900.—The election of officers resulted in the unanimous choice of the following gentlemen to serve for the ensuing year: President, Dr. E. G. Janeway; Vice-President, Dr. William H. Welch; Recorder, Dr. I. Minis Hays; Secretary, Dr. Henry Hun; Treasurer, Dr. J. P. Crozer-Griffith; Councillor, Dr. William T. Councilman.

THE FIRST WOMAN TEACHER OF MEDICINE IN PARIS.—Mlle. Edwardes Pilliet, M. D., has just been appointed by the Department de l'Assistance Publique of Paris an instructor in certain medical branches. She is to lecture on physiology to the nurses at the Hôpital Lariboisiere, and to give instruction in bandaging to the attendants at La Salpêtrière. Mlle. Pilliet is the first woman to be accorded the honor of a teaching position in this department.

PROFESSOR CHANDLER, PRESIDENT OF THE SOCIETY OF CHEMICAL INDUSTRY.—At the recent meeting of the Society of Chemical Industry at Glasgow, Scotland, Professor Charles F. Chandler, of the School of Mines of Columbia University, New York, was chosen President. This is the first time that an American has been chosen President of this society. Professor Chandler will succeed to an office which has been held by such distinguished men as Sir Henry Roscoe, R. A., Sir Lowthian Bell and others. Professor Chandler was one of the founders of the Columbia School of Mines. He was connected for many years with the New York City Board of Health, being appointed its chemist in 1866 and becoming its President in 1873. He held this position until 1884. Professor Chandler will be tendered a public reception upon his return.

DEATH OF LAWSON TAIT.—The death of Lawson Tait occurred suddenly at his home in Birmingham June 13th, in his fifty-fifth year. Dr. Tait's visit to Albany in 1884 and his appearance at that time in the operating theatre of the Albany Hospital are well remembered. The honorary degree of Doctor of Medicine was conferred upon him by the Albany Medical College, and that of Doctor of Laws by Union University. A cable dispatch states that Dr. Tait placed his family in a dilemma by expressing on his deathbed a wish to be buried in a romantic cave in his garden at Llanduno, called Gogarth cave, formerly connected with the ancient abbey of Gogarth. The Home Secretary waived objections and gave the necessary permission. The body was sent to Liverpool for cremation and the ashes have been enclosed in an urn which has been placed in the cave.

PERSONAL.—*Married*, Hull—Ostrander, at Lansingburg, N. Y., Dr. Harry F. Hull (A. M. C. '99), of Lansingburg, and Miss Mildred M. Ostrander. Dr. and Mrs. Hull will live at Proctorsville, Vt.

Married, Hanratta—O'Neil, at Albany, N. Y., Dr. Eugene J. Hanratta (A. M. C. '97), of Watervliet, and Miss Catharine O'Neil, of Albany. Dr. and Mrs. Hanratta will reside at Watervliet, N. Y.

Book Reviews

The International Medical Annual and Practitioner's Index: A Work of Reference for Medical Practitioners. By thirty-two contributors. Seventeenth Volume. New York and Chicago: E. B. Treat & Co. Pp. 671. \$3.

The seventeenth annual volume of this valuable work maintains the same high plane as its predecessors. No extended notice of the character of its abstracts and their value is now needed. The same general plan which has been satisfactory in the past has been followed in the present volume. The first hundred pages are given to a very complete consideration of the new remedies, although heroin, which has become so popular, is not mentioned. Nitroglycerine in large doses, even to 125 grains in twenty-four hours, is justified where there is marked arterial tension. In blackwater fever no mention is made of the recent work of Koch and the association of quinine therewith. Fourteen pages are given to the mastoid operation, too much for the general practitioner and not enough for the specialist. Tuberculosis of the prostate and the diseases of the rectum receive full consideration. Among the special articles which are of unusual interest are "Practical X-Ray Work," "Legal Decisions Affecting Medical Men," and "The Chief Pathogenic Bacteria in the Human Subject." The publishers are to be congratulated upon issuing a volume which is so complete, concise and up-to-date.

Practical Uroanalysis and Urinary Diagnosis: A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M. D., LL. D. (Queen's University); Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School; author of "Bright's Disease and Allied Affections of the Kidneys;" also of "Diabetes: Its Causes, Symptoms and Treatment." Fourth, Revised Edition. With Numerous Illustrations, including Photo-engravings and Colored Plates. In one Crown Octavo Volume, 365 pages, bound in Extra Cloth, \$2.50 net. The F. A. Davis Co., Publishers, 1914-16 Cherry street, Philadelphia; 117 West Forty-second street, New York City; 9 Lakeside Building, 218-220 South Clark street, Chicago, Ill.

It seems unnecessary to do more than to call attention to the fact that this well-known work has deservedly reached its fourth edition — one edition for each year of its existence. Although a volume of 365 pages would seem to be very large for a work confined to the examination of the urine, still the importance of the subject — and what subject is more important in medicine — makes a thorough and complete treatise frequently necessary for reference on doubtful points. The author has

wisely arranged this volume in the same general way as in the preceding editions, devoting more than one hundred pages to urinary diagnosis. The changes made are those necessitated by rapid advance in this field of medicine. Obsolete methods are omitted or receive less consideration, while the improved methods, as determined by clinical observation and experience, receive more space. The author is certainly to be congratulated that his work, which has so many competitors, has been adopted in sixty medical colleges in the United States.

Current Medical Literature

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Significance of Pain in Gynecological Diagnosis.—EARNEST HALL, in a translation from *La Gynecologie* for the *Canadian Practitioner*, January 1899, gives a very good *résumé* of this subject.

Peri-uterine Pain.—This variety of pain has its origin in the tube, ovary or parametrium. It may be primary or transferred; one variety is called, for the want of a better name, pelvic neuralgia. In the acute inflammation of these parts the pain is deep and lancinating, and radiates throughout the pelvis, corresponding to the ramifications of the sensory nerves; in the chronic inflammatory processes, where cicatrices, adhesions or scleroses are present, the pain is local and more specific in relation to the diseased part.

1. **Pain in Ovary.**—The sclerotic or sclero-cystic ovary is usually very painful. This is not surprising if we reflect that the lesion reveals an hereditary or acquired predisposition to the sclerotic processes. The constitution of the patient could in most cases be defined by the term neuro-asthenic. Where the primary inflammation is slight, or where the sclerotic processes indicate a vicious type of degeneration of the ovary, it is certain that the rupture of the follicles is painful, and the work of elimination slow and preceded by a long congested period with apoplexy of the cortical substance. This process tends to the formation of hypertrophy, and is frequently attended by hemorrhage. In such cases menstrual period is particularly painful. If there be prolapse of the ovaries with adhesions the local pain is increased. In the intra-catamenial period, when the ovaries have been primarily affected, we often notice as a consequence a singular alternation upon the two sides of the pelvis, the pain being the one side one month and the other the next.

2. **Pain in Fallopian Tubes.**—Chronic salpingitis is painful for two reasons: First, on account of the exudations causing adhesions with the neighboring organs; second, on account of distention of the tube, usually at the menstrual period. One fact appears to us to be beyond dispute,

that small and lax adhesions no more than the existence of serous exudations are insufficient in themselves to cause pain. It seems that active inflammation and the presence of infection are needed to make this condition painful. The prolapse of the tube towards the cul-de-sac is always troublesome, and, at least, causes slight pain and uneasiness. We should notice the probability of making a wrong diagnosis in salpingitic pain. The patient might complain of pain in one side of the pelvis, when upon examination inflammatory exudation or a tumor may be discovered upon the other side. We have seen a displaced tube lying across the posterior face of the uterus in such a position that its pavilion, extended by exudation, formed a tumor which was fixed to the pelvis on the opposite side. The pain in this case was located in the fine nerves which are distributed upon the tube through the corresponding ligament. The pain of salpingitis is generally fixed, and undergoes increase during menstruation, not previous to menstruation, as in ovaritis. But after menstruation it undergoes marked decrease, and reappears two or three days later. This latter pain is caused by the traction of the adhesions which fix the tube to the pelvis.

3. *Pain in Inflamed Tubes and Ovaries with Adhesions.*—Pain in this condition partakes of the characters previously described. The pain is sometimes in the ovary, sometimes in the tube, the degree of pain depending to a large extent upon the sensibility of the patient. It may be discovered by direct examination that the location of the pain is in the cul-de-sac. In all cases it is present behind the posterior neck of the womb, and is easily produced by a direct pressure. Pain is also present upon the abdominal walls and in the iliac region corresponding to the affected side. It is both deep and superficial, and may be discovered easily by a slight touch of the skin. If the speculum be introduced too roughly, it occasions extreme pain; the same may be said of vaginal douches when harshly given. Cold increases the pain, and too much walking gives great fatigue. Mental and physical exhaustion also add to the pain, and in some women the least annoyance will revive the pain. The return of each menstrual period increases the suffering in a high degree. The duration of the pain varies with different patients, and is increased by actual congestion of the womb, coitus, and may be accompanied by turgescence of the cervical mucous membrane and leucorrhea. The character of these pains is variable. They may be throbbing or extremely sharp; they may resemble severe pinching or convey a burning sensation. It is, however, worthy of attention that the intensity of the pain does not correspond to the importance of the lesions, for some women scarcely suffer any pain from extensive salpingo-ovaritis, while others suffer severely from an extremely small lesion.

4. *Pain in Perimetrium.*—In this class we find exudations, adhesions, cicatrices and chronic infiltrations of the cellular tissue which directly encircles the uterus. We should remember that every cervical, ovarian or

tubal lesion, reacts upon the perimetrium or upon the ligaments of the affected parts. We do not consider the perimetrium of paramount importance, but we are obliged to give it consideration in diagnosis and treatment. Pain in lesions of this part does not always correspond with the location of the lesions, which are found by physical examination. A neuritis may be present, or, in the absence of this, a special nervous susceptibility. True neuralgia is allied to the neuro-asthenic constitution, and is at all times distinct from hysteralgia (painful spasm of the neck), which is found in the median region of the pelvis, and which a direct examination proved to be localized at the internal os.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

Holocain.—In the issue of the *Philadelphia Medical Journal* for the 26th of November, 1898, Dr. ELLETT, of Memphis, Tenn., has an article on Holocain. He mentions the special study of the agent by Hasket Derby, of Boston; Wuerdemann and Black, of Milwaukee, and Randolph, of Johns Hopkins Hospital, adding that the last named has studied it specially from a bacteriologic view-point. The standard solution is of one per cent, and is clear, stable and antiseptic. Randolph has demonstrated its inhibitive influence on bacterial growth, pus-organisms being killed by an exposure of less than twenty-four hours to standard solution. It is a protoplasmic poison, arresting ameboid movement, putrefaction and fermentation. If the solution becomes cloudy filtering renders it clear and boiling does not interfere with its activity. It does not contract the blood-vessels, hence penetrates better and is more readily absorbed than is cocain. The anæsthesia of deep structures makes it the best anæsthetic for iridectomy, as it permits the iris to be cut with absolutely no pain. It permits freer bleeding than cocain does. No toxic effects have been observed from dropping it in the eye, but hypodermic injections of the solution are said to have caused clonic convulsions. The anæsthesia it produces lasts about twenty minutes, but may, by repeated instillations, be prolonged indefinitely with perfect safety. Holocain has more effect on inflamed surfaces than has cocain. The author reports eleven cataract-extractions, as many iridectomies and many other operations that he has performed with the aid of holocain as the only anæsthetic. In only two cases has the anæsthesia been imperfect; in one of these the solution used was old; it was a case of cataract-extraction; the same patient's other eye was operated, later, with complete success, and without the use of other anæsthetic than holocain. The other operation in which the anæsthesia was unsatisfactory was an iridectomy for chronic iritis; the author writes that he thinks no local anæsthetic would have produced satisfactory anæsthesia in that case.

The article concludes with a statement that the author has not used holocain in surgery of the nose and throat.

Prophylaxis of Purulent Conjunctivitis of the Newly Born.—The issue for October 22, 1898, of *Le Progrès Médical* contains an article, by Dr. PÉCHIN, having the above title. It does not discuss solely the classical ophthalmia neonatorum, but urges prophylaxis of all conjunctivites in very young children, in order that this most dangerous form may not so frequently occur. The question of avoidance of exposure to this very dangerous malady is not only a question of interest to families, but likewise to States. He quotes an article read before the American Medical Association, saying that the maintenance of those who are blind, in the United States, because they have had ophthalmia neonatorum, costs this country, annually, twenty-one millions of dollars. One-half of the blind in France have become blind from the effect of the contagion of vaginal secretions, at birth. One-third of the blind of Germany and Austria have become so from ophthalmia neonatorum; in all Europe, ten per cent of the blind are victims of the same malady; such tenth numbers 30,000. When the contagion dates from birth, the disease appears about the third day thereafter; it may eventuate from some contact, after birth, of articles of the toilet or the mother's hands, with the child's eyes. Fuchs reports cases in which the inoculation is made before birth; children have been born with blennorrhœa already developed, and even having the corneæ already destroyed. Most pregnant women have vaginal catarrh, whether mucous or purulent. The author risks leaving the limits of his subject to say that everyone who has once had blennorrhœa should, before marrying, receive the assurance of medical experts that it has been actually cured; even tho' it may seem, to the victim of it, to cause no trouble. In such case the physician ought to examine the urine and urethral secretions, several times, if necessary, to prove whether the urethra is immune. It is wrong to consider blennorrhagia a purely local malady; its virus may determine orchitis, cystitis, endometritis and salpingitis. Likewise, in relatively distant organs and tissues, in the same person, a dozen other maladies which are named. If such difficulties may arise in the man alone, how much worse may be the case after marriage, when the two marital partners may mutually infect! Not only ought the protection of the child's eyes be in effect during its birth, but the mother's vagina ought to be irrigated antiseptically before birth. The child's eyes ought to be carefully washed after it has been delivered, before cutting the cord. This should be done with tepid, boiled water, before the general bath, and certainly *not* with the bath-water, *after the general bath*. Absorbent cotton suffices for the application of the water. The author does not credit the advantages of strong solutions of the bichlorid of mercury or nitrat of silver. Credé's method has not his endorsement, he saying that, by it, injury of the cornea may be substituted for ophthalmia neonatorum. Credé's experience at the Leipzig Maternity Hospital, of reducing the ten per cent, of the latter disease, to one or two per cent, is quoted. Dr. Péchin says he knows many accoucheurs who do not use Credé's method because of the resultant scarring of the cornea; that they can produce as convincing statistics as can Credé, but in opposition to his. That nitrat of silver may produce

chemical conjunctivitis, about as bad as the disease its application seeks to prevent, this author maintains. He rejects the modern protargol for similar reasons. In the rural districts of France, most accouchements are conducted by *sage-femmes*; when the district physician calls to officially know of the child's birth, within a day or two thereafter, ophthalmia neonatorum may not have declared itself yet. If it appears subsequently, there is a chance that proper attention to it may not be given. On such accounts, the *sage-femmes* ought to be taught that every ophthalmia, even tho' apparently benign, may be grave and causative of blindness, and that a physician ought to be called as soon as possible after the appearance of such a disease.

The Open-Wound After-Treatment of Cataract.—In the issue of the *Philadelphia Polyclinic* for the 5th of November, 1898, Dr. WENDELL REBER has an article with the above title. He says that the relative merits of bandaging eyes, after extraction of cataract from them, and of the method of leaving them without much bandaging, has recently been discussed in the German ophthalmic press, and that such discussion brings to mind the vigorous way in which this subject was threshed over in our own eye journals, a few years ago. The old custom of bandaging both eyes, and confining the patient in a dark room, has been abandoned and, in breaking away from this custom, many have overstepped the bounds of conservatism and are now either advocating open-wound treatment or the least bandaging that the surgeon thinks safe.

Dr. Reber reports a case in which he operated on both eyes of the same patient, on the right eighteen months earlier than on the left, bandaging in the first instance and omitting most of the bandage in the case of the left eye. The operation on the right was done under cocain, and with rigid antiseptic precautions, with the iridectomy, because the iris fell before the knife, and the section included the iridectomy. Both eyes were closed with a shield and starch bandage for three days, when, on removing the dressings, the right globe was found much injected. A one per cent solution of atropin was used four times daily, with application of the bandage after each instillation. In the next twenty-four hours there developed hypopion with iritis and much chemosis; these were treated with leeches and atropin, of strength of 3:200, every two hours. The bandage was left off. Seven days after the operation the eye was much better; sixty centigrams of potassium iodid after each meal, and four grams of sodium phosphat each morning, were ordered and the eye quieted down until twenty-three days after the operation; then it again flushed up vigorously; there was a small hemorrhage from the iris; these morbid conditions were dissipated by vigorous leeching, atropin and hot stupes. The patient continued atropin, iodid and diaphoresis on alternate days. Four weeks later the eye was quiet and had an opaque capsule, which reduced the vision to 2-60. Discission brought vision to 6-24, with a proper correcting glass. Six weeks later the vision became 6-12, with the same glass. Why the right eye should have developed a bacterial infection, despite the utmost aseptic precautions as to field of operation,

instruments and dressings, and the excellent condition of the patient, is not clear to the author. Patient's environment and nursing were both good. The healing process occupied quite eight weeks.

Eighteen months after the first operation the patient returned with a vision of 6-9 in the previously operated eye, and so pleased with the result as to insist upon having the left eye "cut." The patient was told of the prognosis, from experience with the right, and urged to adopt all possible precautions. A preliminary iridectomy on the left was done with the same asepsis as before. Both eyes were firmly closed with strips of adhesive plaster, a centimeter in width, which had been subjected to fumes of formol. The dressings were removed on the third day. On the twelfth day the left eye was quiet and the cataract was extracted, the same antiseptic precautions being used as had been when the other eye was operated; strips were again applied to both eyes; ten days later the left eye was entirely healed, and with the proper glass had nearly sixty per cent. of Snellen vision. The healing was uneventful and included twenty-two days for both preliminary iridectomy and extraction, as compared or contrasted with the fifty-six days of painful healing process in the right eye, after one operation.

The author appreciates the absurdity of attempting to draw conclusions from one case. These two extractions are cited in order to draw a comparison of the merits of the two methods when used under absolutely identical conditions. In this article the author makes several very interesting statements; one admitting a tendency to cataract as characterizing a family. After the first operation he used atropin dissolved in a 1:5000 formaldehyd solution. He says some eyes will surely flush up after twenty-four to forty-eight hours' bandaging, and admits his inability to explain this; he likewise says that recent bacteriological tests prove it impossible to sterilize the conjunctival sac; that these sacs in elderly persons are seldom free from pathogenic micro-organisms. He quotes Hjort as believing "that as long as the wound is open, the aqueous humor takes care of the invading microbes, and when the wound is closed the stream of tears and the lid movements sweep them away from the half-closed corneal tissues." ¹

Dr. Reber says that in fifty cataract extractions that he had seen done by his early teachers and which were dressed with nothing but strips of gold-beater's skin, thirteen millimeters wide, over both eyes, the average results were as good as he has known personally or has seen tabulated in literature. He concludes that any bandaged, operated eye that has chemosis or severe conjunctivitis within forty-eight hours after the operation, will do much better thereafter if closed only with a thin strip of sterilized adhesive plaster, which possesses the further advantage of permitting the use of solutions for cleansing, or collyria for treating the inflammation.

ALBANY MEDICAL ANNALS

Original Communications

For the ANNALS.

NOTES ON THE VARIATION OF GLYCOSURIA IN DIABETICS.

BY FREDERIC KRAUS, JR., M. D.,

Carlsbad.

As we know by the researches of Külz, Traube, Posner and Epenstein, nearly all cases of diabetes show fluctuations in regard to the 24 hours' course of glycosuria, which possess a certain regularity, at least nearly always in the mild forms. (Naunyn.)

Posner and Epenstein found two maxima of glycosuria, one of them, and according to Naunyn, the higher one, in the hours of the forenoon, the other toward evening. These fluctuations can go so far, that diabetics, who have reached a great tolerance for carbohydrates, at one time show a measurable amount of glucose in the urine, if they take the smallest amount of carbohydrates for breakfast, that is to say, on the empty stomach, although they are able to assimilate, perfectly, large quantities of carbohydrates, if taken later in the day and especially in connection with copious meals. Cases of this kind are not very frequent, but by exact examination of the intensity of the diabetic glycosuria similar cases may be occasionally observed. I found in the whole literature of diabetes, as far as I could obtain it, only a very small number of similar cases and for this reason and on account of the great value which such observations have for the diabetic

treatment, I take the liberty to report the following two cases, with omission of all unnecessary details:

Case No. 1 is from the clinic for diabetic patients of Prof. Dr. von Noorden and Dr. Lampe in Frankfort o. M.; Case No. 2 I observed during a course of Carlsbad waters, which the patient took under my direction in the summer of 1898.

Case No. 1. Mr. B., banker from D., aged 47.

Anamnesis: No hereditary taint. Disease diagnosed since 1893. The morbid history contains nothing of interest except that patient says that his tolerance for carbohydrates, especially if taken at breakfast, has been much lessened during the period immediately preceding his reception at the clinic.

Present condition: (July, 1898): Patient of normal mental condition, well built; his muscles and panniculus adiposus well developed; skin normal, chronic eczema in inguinal region and yellow pigmentation on the lower parts of the thigh; the organs of chest and abdomen normal, the reflexes normal. In the urine no albumen, Gerhardt's reaction negative. The fluctuation in this case is shown by the following diagram:

DATE.	AMOUNT OF URINE.	SPEC. GR.	NYL.	POL.	DIET.
July 18	1. 280	1.030	+	0.6% (1.68 gr.)	First breakfast, 50 gr. bread.
	2. 400	1.030	0		Lunch, 50 gr. bread.
	3. 720	1.027	0		
19	1. 600	1.026	0		First breakfast, 25 gr. bread.
	2 & 3. 870	1.027	0		Lunch, 25 gr. bread.
20	1. 630	1.025	0		Lunch and five o'clock tea, each time 50 gr. bread.
	2. 200	1.025	0		
	3. 700	1.022	0		
21	1. 500	1.026	0		Lunch and five o'clock tea, each time 75 gr. bread.
	2. 275	1.025	0		
	3. 900	1.022	0		
22	1. 620	1.023	0		Lunch and breakfast, each time 100 gr. bread.
	2. 125	1.021	0		
	3. 900	1.022	0		

1. Urine between 8 A. M. and 2 P. M.
2. " " 2 P. M. and 8 P. M.
3. " " 8 P. M. and 8 A. M.

That shows, that patient could not assimilate 50 grams of bread, at breakfast, but had no sugar in the urine after a four times larger quantity, taken later in the day.

Case No.2. Mr.R., Professor in the University in G. ; aged 57.

Anamnesis: No hereditary taint. Patient had influenza two years ago, after it an enlarged liver, increased thirst and polyuria; bitter taste in the mouth. In February, 1897, there was, with mixed diet, 5 per cent of glucose in his urine; only after three months' strict diet the glycosuria disappeared. The bodily examination gives perfectly normal results; liver at the time not enlarged. In the urine no albumen; Gerhardt's reaction negative; no sugar (strict diet).

As shown in the following diagram, I increased gradually the doses of carbohydrates, to be eaten at lunch and dinner. Patient himself, a very keen observer, found out that he could not assimilate carbohydrates, if taken at breakfast. After I had reached a tolerance of about 80 gr. carbohydrates, i. e., 120 grams bread, 250 ccm. milk, and one apple, I tried to give him 30 grams bread, equal to 18 grams carbohydrates for breakfast. Glycosuria at once reappeared. I then increased his carbohydrates by something more than that, for his other meals, with the result, that his urine remained free from sugar and the patient gained in weight.

DAY.	AMOUNT OF URINE.	SP. GR.	NYL.	POL.	DIET.
Apr. 26	1410 ccm.	1.024	0		Strict diet.
29	1310 "	1.027	0		60 gr. bread; 250 ccm. wine.
May 3	1400 "	1.025	0		30 gr. bread more.
7	1200 "	1.027	0		120 gr. bread; 1 apple; 250 ccm. milk; 250 ccm. wine.
10	*200 "	1.030	+	2%	30 gr. bread at first breakfast.
12	1200 "	1.024	0	0	120 gr. bread; + 500 ccm. milk; + 2 apples; + 250 ccm. wine.

* Immediately after breakfast.

A third case of this kind is reported by Naunyn: a diabetic patient, aged 28, who could take, during a day, 100 gr. bread, 60-70 gr. potatoes and one apple, without glycosuria; but when only five grams of bread were taken with breakfast, glucose appeared in the urine.

The explanation of these facts is, according to Naunyn, that in the empty intestines the introduced carbohydrates more quickly digest and resorb and so the diabetic organism is supplied with more sugar at once, than it can assimilate. A similar fact, in the contrary sense, is the paradoxical diminution of glycosuria, connected with gastro-intestinal troubles (von Noorden), where with equal amounts of carbohydrates in the food, less glucose appears in the urine, the result of diminished digestion and diminished and retarded resorption.

The therapeutic value of observations of this kind is very important. A rational antidiabetic diet means to give the patient as much carbohydrates as he can assimilate. Therefore it is certainly a great profit if we are able to fulfill this condition after exact examination of the daily fluctuation of the glycosuria, by prescribing a diet not only regulated in regard to quantity and quality, but also regulated by the hour.

As a prognostic these facts are also of some importance, because as said before, only mild cases show fluctuations of such regularity; the fluctuation in the severe cases being irregular and not so pronounced.

Finally, I fulfill a very agreeable duty in giving my sincerest thanks to Prof. von Noorden and Dr. Lampe for their professional kindness.

LITERATURE.

v. Noorden, *Zuckerkrankheit und Ihre Behandlung*.
Naunyn, *Diabetes Mellitus*.
Posner and Epenstein, *Congress f. innere Mediz.*, 1891.

A NEW THROAT REMEDY—BENZOINOL AND RESORCIN COMPOUND.*

By L. E. BLAIR, M. D.,

Albany, N. Y.

Under the name of Benzoinol and Resorcin Compound I have recently devised a formula which I think has many proprieties which will readily commend themselves to the physican and specialist who have occasion to use and to prescribe an oily spray. For a number of years I have used watery solutions of

* Read before the Albany County Medical Society, January 11, 1899.

resorcin and glycerine for acute attacks of inflammation of the mucous membranes, and was especially pleased with the anæsthetic, antiseptic and astringent qualities of the drug resorcin. For example, in the swollen and congested mucous membrane of the nose in asthma and hay fever patients, I found that, within a short time after its application the mucous membrane would contract and grow pale and have a primary effect, like weak solutions of cocaine. I do not think that resorcin has had any wide use in throat practice, and I am not familiar with any formula on the market that combines an oily menstruum with resorcin.

To review briefly some of the characteristics of resorcin, it occurs in colorless crystals having a peculiar smell, resembling that of carbolic acid, and a bitter sweetish taste. It dissolves readily in water and still more readily in alcohol and ether. In its effects it resembles its congener, carbolic acid, but is in general less active than that substance, and in particular, very much less poisonous, constitutionally. Resorcin inhibits bacterial growth, but probably less potently than carbolic acid. Locally the drug is without effect upon the sound skin, but applied undiluted to a moist mucous membrane it is mildly caustic, and at the same time anæsthetic and healing. I desire to call attention here especially to the very valuable quality possessed by resorcin, namely the *anæsthetic* effect to every applicable degree when applied to mucous membrane. By reason of this effect it may be applied in its full strength, even to such sensitive parts as the interior of the larynx for cauterizing purposes, and it is well borne by the patient. This was an observed fact before the days of cocaine. Internally it can be given in very considerable doses, as compared with carbolic acid, and such doses administered to a fevered subject will show to a marked degree the peculiar antipyretic effect so characteristic of the phenols. Its advantages over carbolic acid are that, it is far less poisonous, hence can be used in larger quantities; far less caustic, and hence can be used in greater strength; and markedly anæsthetic and astringent. The healing property of resorcin has been especially pointed out by Andeer, when used in ointments in the various inflammatory skin diseases, embracing a wide range from the syphilitic ulcerations to the eruptions of the acute exanthemata. Andeer claims to have thus produced striking amelioration in such diseases as small-pox, scarlet fever,

measles and leprosy by inunctions over the whole body of resorcin-vaseline. Anyone familiar with the use of this drug will not doubt it for an instant. The healing quality mentioned has, of course, reference to the soothing effect, quieting pain, and hence, relieving nerve irritation.

Rest and Pain, the title of that wonderful medical work written in 1862, by Prof. John Hilton, has for its key-note the influence of quieted pain, rest, on repair and healing. It is the basis of healing when applied especially to an inflamed mucous membrane. Hilton says the object of writing his book was to show "how largely we are indebted for our professional success in surgical practice to the recuperative power of Nature, especially when helped by the suggestion of a thoughtful surgeon—the great lesson of the therapeutic value of mechanical and physiological rest."

Resorcin, then, is a drug which, when applied to mucous membrane in various strengths, will relieve pain, produce marked anæsthesia, is an astringent and healing agent. The only serious objection to the watery sprays in the head, is, that very frequently after their use there is left a disagreeable effect similar to an acute attack of cold, and then the watery solutions provoking temporarily an increase of mucous secretions, the remedy is soon washed away and its effect lost. When dissolved in an oily menstruum it is far more effective, being kept in situ much longer by virtue of an oil, especially if the oil used is not irritating. But the problem has been to obtain a petroleum product as a menstruum that is freed from the crude elements, and at the same time has not been changed in the properties so as to result as an irritant. Everyone that has made extensive use of the petroleum oils in sprays has been disappointed with the drying and irritating effects of the different preparations on the market. I do not wish, for obvious reasons, to specify the make of any particular chemist, but the fact remains that in the effort to produce an elegant-looking article, freed from disagreeable odors, the virtue of the oil has been sacrificed, and instead of being soothing, it has been rendered harsh and drying. This is largely due to the sulphuric and sulphurous acids used in the refining processes. For this reason other oils than the petroleum kind have been experimented with, such for example, as lard oil, olive oil, peanut oil, cotton seed oil, but either on account of the cost, the specific

gravity, or inherent peculiar odors, which could not be eliminated (for example lard oil), have not proven satisfactory. Further effort, however, was made to present petroleum in such a form as to overcome the injurious and objectionable features produced by the acids, and a few years ago, under the name of "Benzoinol" a preparation appeared, and the claim was made for it that it was produced in "an unchangeable, tasteless, odorless, colorless, and absolutely bland and non-irritant condition." The addition of benzoin gave it additional attraction as an antiseptic and fragrant preparation, and one that would remain unalterable. Extensive use with this preparation has amply borne out all the original claims made for it.

Having formerly had agreeable results with aqueous solutions of resorcin, and finding that this valuable medicine had not appeared among the various formulæ of the benzoinol preparations, I suggested some time ago to the Benzoinol Manufacturing Company, to make for me samples of different strengths of benzoinol and resorcin, so that I could submit them for clinical use. I found that solutions containing twenty grains to the ounce could easily be tolerated in the nose and throat, but that the first effect was a little sharp and disagreeable. Two and one-half grains of eucalyptol and five grains of menthol were added to the formula, and a pleasant compound was obtained, the other drugs modifying the primary sharp effect of the resorcin, and also adding two very valuable and agreeable antiseptics. I tried stronger solutions of the resorcin, but think that with the following formula the best results were obtained, viz.:

Resorcin, 80 grains; eucalyptol, 10 grains; menthol, 20 grains; benzoinol, 4 ounces.

This preparation will shortly appear under the name of "Benzoinol and Resorcin Compound."

This formula contains the emollient and soothing properties of benzoinol, which, when applied to the mucous membrane of the nose, will not cause a flow of secretion, showing clearly that it is not an excitant or irritant, and it also has all the virtues of resorcin in large quantities, which are, briefly, anæsthetic, analgesic and healing, combined with the well-known properties of menthol and eucalyptol.

In practice this formula has a wide application. I have used it very successfully in whooping cough, employing a fine oil

atomizer and spraying hourly into the nares which the child will not resist. By giving the tube the proper direction, large quantities of the oil will reach the larynx and lungs. In former years I used very successfully, fifteen per cent watery solutions of resorcin in whooping cough, applying the remedy to the pharynx and larynx and also still stronger solutions in a steam atomizer, frequently curing patients in two or three weeks. Benzoinol and resorcin will be found very efficacious in all the acute catarrhal cases of the upper breathing tract; in hay fever and asthma especially the relief exerted upon the hypersensitive terminal nerve distribution is remarkable; in acute laryngitis, with hoarseness and aphonia, the relief is rapid and the effect of the oil is sustained for hours, and easily displaces the use of cocaine, so popular with public speakers and singers. It far surpasses cocaine in its application to mucous membrane. The well-known constricting and drying effect of cocaine in the fauces and larynx is missing, while on the other hand the injurious secondary effect of cocaine do not take place, namely, the relaxing and weakening of the blood vessels and consequent increased congestion, due to a weakening of the vaso-motor nerves from over stimulation. It is just here why cocaine failed so signally in the treatment of the acute attacks of hay fever. At first the swollen and sensitive condition of the mucous membrane was relieved, but when the effect of the drug wore off the patient found that the obstruction was severer, pain more prominent, and secretion largely increased, all due to the pernicious after effects of cocaine. The reactive, paralyzing effect of cocaine on the blood vessels, as a secondary cause of hemorrhage, in operations in the nose and throat, and more especially in reference to hypertrophied tonsils of adults, was first pointed out in a paper by the speaker, read before this society in January, 1888, published in the ANNALS of February of the same year, and to which reference is made in Burnett's *System of Diseases of Ear, Nose and Throat*, Vol. II, page 594.

Resorcin on the other hand is free from these pernicious secondary results, is non-poisonous in the doses used; no dangerous drug habit can be formed like the use of cocaine; on account of its being non-poisonous and non-irritating, it can be used freely; the mucous membrane is strengthened and repaired by a reliable, healing and antiseptic astringent. Being dissolved

in a valuable vehicle like benzoinol, which in itself does not provoke any irritation of the mucous glands primarily, and so no excessive mucous flow, the parts are bathed for hours with the desired remedy, which is applied as effectually as salve would be to a burn on the skin, remaining in contact and exerting the desired therapeutic effect. In practice this has been repeatedly verified by the blanched and relieved congested appearance of the mucous membrane, and can easily be recognized by the patient in the prolonged sense of relief obtained. I have been able to recognize the effects on lining of the nose, throat and larynx for four hours after application.

It has a very important and valuable place in the medication of the naso-pharynx. It will cause a marked contraction of the posterior hypertrophied ends of the turbinal bones, and will cause a positive shrinkage of the pharyngeal opening of the Eustachian tube when the contraction and closure is due to a spongy catarrhal condition, and one especially influenced by dampness and cold. Used in a Globe nebulizer after the naso-pharynx has been well oiled, the fine vapor will find its way into the middle ear, and will also assist very materially the inflation and medication of the middle ear. After operations in the nose and naso-pharynx, hemorrhage will be favorably controlled and the healing processes furthered.

The value of eucalyptol in the formula is that, it is a pleasant and odorous antiseptic; in its nascent state will reach distant portions of the breathing tract; locally in evaporating it will produce loss of heat and congestion, due to the well-known physical law, that evaporation of a substance extracts heat locally from the spot where it is applied. It has been for many years a favorite preparation of Lister, who pours a few drops of it into his dressings, has his gauze made of it, as well as ointments. As an expectorant it has marked value.

The well known properties of menthol are its mild, cooling, and antiseptic ones. It is also a correction to the formula.

A few words as to the preparation. Benzoinol and resorcin compound is a pale straw-colored oil, free from precipitate and of a fragrant odor. In temperature lower than 50° F., the menthol shows a tendency to separate from the fluid and recrystallize on the sides of the container. By dipping the bottle in warm water the fluid becomes uniform and clear again. In its use on

the upper air passages it is pleasant, agreeable, cooling, mildly astringent and leaves the breath fragrant; in the nose it is non-irritating and does not leave any disagreeable smells, and the patient is not labelled by its use that "he has been to the doctor's," as is so often suggested by the use of the iodine and carbolic acid preparations. Even the use of nosophen powder, a most valuable one, will soon impart at least a portion of the dreaded odor of iodoform.

To sum up the claims for benzoinol and resorcin compound, I should say:

First. That it is markedly anæsthetic and analgesic.

Second. Antiseptic, astringent, non-poisonous, non-irritating and healing.

Third. Not suggestive of the drug shop as iodine, iodoform and carbolic acid.

Fourth. It has a wider range of effective application not covered by any other formula for an atomizer that I am familiar with.

204 STATE STREET.

OUR WATER SUPPLY, AND THAT OF OUR NEIGHBORS.*

By JAMES D. FEATHERSTONHAUGH, M. D.,

Cohoes, N. Y.

The question of water supply, river pollution and sewerage are so bound together that a consideration of one, in most instances, involves a determination of the others. Urban populations, for the most part, are dependent in great measure upon streams or rivers for their water supply, and, having made use of their waters for domestic or physiological purposes, return the waste by means of gravity to their original sources. Thus with the increasing growth of cities pollution of the streams upon which they are built advances *pari passu*.

In the early history of the State of New York, before the Erie Canal, and before the building of the great railroad of the State through the depression of the central and eastern watersheds,

* Read before the Albany County Medical Society, January 25, 1899.

when the density of population was less, when the large cities of the Mohawk and Hudson River valleys were but small towns, or insignificant hamlets, river pollution was a negligible quantity and indeed unthought of. Fifty years of growth have seen the census of the State more than double itself, and with this have sprung up towns and villages unknown to the fathers. To-day a population of nearly three hundred thousand souls lives in towns upon the Mohawk and its tributaries. Nearly all of them pour their crude sewage into the stream above us. Under such circumstances, it is not singular that there should be serious sanitary objections to its use for municipal purposes.

The older civilizations across the Atlantic, under like conditions, forced by a greater density of population, and by the greater pollution of their streams, have either protected their watershed, filtered their water supply or treated their sewage before returning it to the source of supply.

In the United States very little has been done to protect populations from the effects of river pollution. Thus in the last census the whole population protected by sand filters amounted only to one hundred and forty-two thousand, and it is believed that the population of cities in which either filtration or precipitation of sewage is performed is yet smaller.

The evidences of river pollution are always to be found in the reports of the State—a record of our sanitary condition and a measure of our civilization.

It cannot be too well understood by us, that there are certain preventable diseases which are mainly water-borne, and that certain conditions in the water supply being fulfilled, these diseases must from the nature of things exist.

Many diarrhoeal diseases, the cholera, typhoid fever, are conspicuous and well-known instances of diseases which are water-borne.

It has long ago been recognized that a disease we are very familiar with in this connection—typhoid fever—is dependent upon a specific cause—the typhoid bacillus—which, whether in the soil, the vault, the sewer, the milk we drink or the water we quaff, retains its vitality, multiplies and develops, and brought to us by the great universal menstruum is passed on in its endless chain. One of the duties of the State is a proper consideration

of the public health. The municipalities, however, owing to their more concrete form, have yet a greater interest in such matters, and have been foremost in putting into practical use the old saying, "Public health is public wealth." The past ten years have, moreover, been an era of sanitation. It has vivified the art of surgery, has inspired medicine and even stirred up the smaller municipalities.

Here, where two mighty rivers meet and where a population of nearly a quarter of a million souls lives within a radius of ten miles — some day to be fused under one municipal government — here, also, the tendency of the day is plain; and sanitary changes have been put in effect.

In almost all of these contiguous cities the first steps in our modern civilization have been taken. Improved systems of sewerage coming first, then modern pavements of asphalt or vitrified brick and better water supply, although crude sewage is still turned into the streams. It is worth while, perhaps, to inquire what is the water supply of the various cities and villages which cluster around the head of tide water in the Hudson river. Albany, which is the lowest upon the Hudson, has a population of about 98,000. It has been almost wholly supplied by water pumped from the Hudson river, the intake being probably contaminated by its own sewage. The conditions here having been favorable for serious pollution at the intake, we should expect to find a high typhoid rate. The rate has been about 9.04 deaths for 10,000 living. The necessity for a purer water supply has been felt there for some time, and endeavors toward that end have been made.

Troy, a few miles above, has a population of about 67,000. It is supplied in a great measure by surface water impounded on the hills above; some water, however, is pumped from the Hudson river. The typhoid rate for five years has been about 4.9, its lower rate probably due to purer water supply.

Watervliet, with a population of about 15,000, draws its water supply from the Mohawk river a few miles above Cohoes. The number of deaths from typhoid during the last two years has been 32, which equals about 10 per each 10,000 living.

Cohoes has an estimated population of 23,000. The water supply is pumped to three reservoirs from Mohawk at a point considerably above the town. Sedimentation occurs to a considerable degree in the river above the dam for a distance of several miles.

The death rate from typhoid for ten years has been as follows:

1889.....	9 deaths.	1894.....	12 deaths.
1890.....	31 “	1895.....	21 “
1891.....	42 “	1896.....	13 “
1892.....	18 “	1897.....	12 “
1893.....	14 “	1898.....	20 “

An average of 19.2 a year, or a rate of about 8.6 per 10,000 living, and a maximum of 18 per 10,000 living in the year 1891.

Lansingburgh, with a population of about 10,000, has its water supply in the hills above it. The typhoid rate during past five years has been about 5 per 10,000 living.

Waterford, which takes its water supply from the Hudson above the sewage outfall of any of these cities, has a population of about 5,000, and its typhoid rate has been during past five years about 6 per 10,000 living.

Green Island's rate has been about the same as that of Waterford.

Bearing in mind that the death rate of the whole State of New York for typhoid is only about 2.5 per 10,000 living, and that density of population does not affect this rate *per se*, since in the maritime district of the State, with an urban percentage in population of 90, the rate from typhoid is only 1.7, and remembering that the immense city of London has a typhoid death rate of only 1.4, it must be conceded that our sanitary showing is a bad one.

Let us, however, compare these rates with those of some towns in which natural sand filtration has been used, and I will take for comparison the three cities nearest to us employing such means for filtration.

The city of Hudson, below Albany, takes its water supply from the Hudson river. It uses the natural sand filtration system. Notwithstanding that the river at this point is comparatively more polluted than the Hudson or Mohawk at Albany or Cohoes, since a full half million people sewer above it, the death rate has been for many years about 2.2. per 10,000 living.

The oft-quoted case of Lawrence, Mass., which is an admirable instance of water purification will bear retelling. Lawrence takes its water supply from the Merrimac river, which drains a large region into which an urban population of 300,000 pours its sewage. From 1887 to 1892 the average death rate from typhoid was 11.9 per 10,000 living. In 1893 one of the best constructed

sand filters in the country was built, and for the years 1894, 1895 and 1896 the death rate from typhoid was, respectively, 4.7, 3.1 and 1.9 per 10,000 living.

The city of Schenectady, eighteen miles above us on the Mohawk, a city of about 23,000 inhabitants, took its water supply from the river a short distance above its sewage outfall. There was no doubt but that the sewage found its way to the intake. For many years the number of deaths from typhoid was large. The returns for the years 1892, 1893, 1894, 1895 and 1896 were as follows: 50, 21, 11, 14 and 24. Assuming the population to be 23,000, the rate per year per 10,000 living would be 10.4. In 1896 a system of filter wells was excavated in the sand near the river, and in February, 1897, the filter service began. The number of deaths during that year was six, which is a rate of 2.6.

To make the comparison simpler and plainer, let us add together the death rates from typhoid of the three cities of Albany, Cohoes and Watervliet, and, striking an average, compare it with the post filtration death rates of Lawrence, Schenectady and Hudson treated in a similar manner. The figures resulting for the first series are 9.2, and for the second series, 2.6. If these figures are correct, and they are taken from the returns of the various registrars of vital statistics, they show two things: First, that where the conditions are tolerably similar the typhoid death rate is closely alike, being high in the cities which pump directly from the Mohawk and Hudson rivers, and low in those cities which filter the water before it is delivered. Secondly, they show the influence of filtration in lowering the typhoid rate. Should there be any doubt in this matter, a glance at the list of cities with their typhoid death rate, so carefully prepared by Mr. John W. Hill, C. E., and read by him in a paper entitled "The Water Supply of Cities," cannot fail to strike any observer with the overwhelming influence that proper purification of the water supply has upon the typhoid rate, and it will be observed that the best results are obtained when the use of natural filter beds for the water supply are conjoined with the treatment of sewage.

It has been said that no river is long enough to purify itself, and it certainly is true in this sense, that wherever a river is polluted grossly by sewage from the cities along its course, each city like a relay upon a telegraph line takes in the cause of contagion, and reproducing it in the human laboratory of its population, turns

a fresh infection through its sewers into the stream. In the epidemic of '90, '91 this was very evident. The crest of that typhoid epidemic in the various cities on the Mohawk and Hudson had a movement in time not synchronous with the movement of the water. At each city in its descent there was a period of arrest in which the cycle of incubation in the human economy, the discharge into the sewers, and the return to the river took place, and a study of the epidemic in the cities of Amsterdam, Schenectady, Watervliet and Cohoes will show that the periods of the height of the epidemic for these various cities had a sequence in time which was related, not to the movement of the river, but to this cycle. It is this factor of reproduction which ever remains the source of danger, and which renders impossible natural methods of river purification.

Many of these cities have, after much agitation of the subject, become alive to the grave importance of the question of a purer water supply.

Schenectady has, as before stated, abandoned its mode of water supply and is now using the water of the Mohawk river filtered through the natural sand beds of the river.

Albany, after some experiments, is now constructing large sedimentation beds and an extensive system of natural filtration for the waters of the Hudson river, which will cost in the neighborhood of a half million dollars.

Troy is gradually extending its water supply in the Brunswick hills and is depending less and less upon its supply from the Hudson.

The Water Commissioners of Watervliet, at a meeting held in December, voted unanimously to abandon the present supply from the Mohawk for a supply from the hills above them.

Lansingburgh has had introduced a bill in the present Legislature granting the city increased facilities for impounding or collecting water from the streams upon the watershed of Mount Rafinesque.

Cohoes and Waterford still patiently drink their sewage without complaint.

While the most efficient remedy for the pollution of rivers is evidently its prevention, this prevention is not by any means a simple problem, and although the tendency of the best European practice has been toward the purification of sewage before it is

turned into the rivers, it is possible, and this is a question for the expert sanitary engineer, that under the conditions obtaining among us, the State has done wisely in refraining from any general acts looking toward river pollution.

From the purely economic aspect, the treatment of sewage upon these rivers would be a formidable affair. The great majority of the cities use the combined system of sewerage, in which all storm water is carried, and if the water supply should be as generous generally as it is in the only two cities of which I have records, viz., Albany and Cohoes, in which 150 and 180 gallons, respectively, are consumed daily by each inhabitant, the taxpayers would revolt at such a prospect of bankruptcy. As, however, both economy and efficiency are obtained by the method of slow sand filtration, and as such waters are generally reckoned as next in purity to high mountain springs, it will be seen that the tendency to abandon the use of the polluted waters of the Hudson and Mohawk rivers, and to establish a different supply and more particularly to establish municipal filtration of river water, is justified by economics as well as by prudence.

A TYPHOID TEMPERATURE CHART, FOLLOWED
FIVE MONTHS LATER, IN THE SAME SUBJECT,
BY A RATHER SIMILAR CHART.*

By J. L. ARCHAMBAULT, M. D.,

Cohoes, N. Y.

Mr. Chairman, Gentlemen:

From "Water Supply" into "Typhoid Fever" the drift seems natural and logical, especially when the one is so unreservedly considered as the causative agency of the other; and in presenting you these two fever sketches drawn on the same chart on account of their having occurred in the same patient at several months' interval, one of them at least deserving to be considered as typhoid, although both are quite alike, I feel that the whole subject of typhoid fever could have been taken up with much apropos. The more so that there is, at present, in Cohoes, a prevalence of the disease, which, in the opinion of many, is not short of an epidemic. Cases of the severest type have occurred, several of them rapidly

* Read before the Albany County Medical Society, January 25, 1899.

fatal. The serious illness of our esteemed confrère and oldest resident physician, Dr. Witbeck, is a complicated case of that fever. On the sick list, from an attack of the same disease, is also registered the name of our other esteemed confrère, Dr. Lartigau, of the Bender Laboratory. Dr. Lartigau had volunteered to read at this meeting, and his article had to be withdrawn from the program and the name of the speaker substituted to his (much to the latter's regret). Owing to these circumstances, I may venture to say that, both in Albany and Cohoes, the attention of the profession has been concentrated on "typhoid fever," and that it would have been of unusual interest to treat the subject in a general and exhaustive way.

These facts not being anticipated at the time of preparing the notes on the case now to be reported, I can only hope that — while I am calling your attention but to one particular point in the history of typhoid fever; namely: its possible, and in this case apparent, recurrence after a period of a few months — you might take occasion of what I shall say, to broaden the scope of the paper and follow it by a general discussion of the subject.

Anna K., aged 13 years, was taken with typhoid fever on January 1, 1898. She had the usual, regular, uncomplicated run. The fever changed on the twenty-third day. In support of the nature of the disease, her brother, Frank, 20 years old, was taken sick with the same fever at the time that she was convalescing, and went the regular three weeks' course. On the 24th of May, that is, nearly five months from the day she first took to bed, Anna was again taken sick and had a second run of fever quite similar to the first. In this last, she touched the normal point in the morning somewhat sooner (on the seventeenth day), but it kept oscillating for a longer period, and settled down for good only on the thirty-first day; on the whole, it was a more protracted siege. The chart also did not present so regular a curve; there was greater oscillation between the daily exacerbations and remissions; a higher point was reached, 104 2-5, a whole degree higher than in the first. But both attacks had the following common points:

In both, once, the highest temperature changed about without any special reason and occurred in the morning; in the first, this occurred on the seventeenth day, in the second on the tenth; both times it registered 103°.

In both attacks, the morning temperature became subnormal

after the crisis, but it continued so only for six days the first time, while in the second it remained more or less so for twenty-eight days, apparently until the child had pulled herself out from the deep anæmia and the prostration of the vital forces incidental to this double course of sickness.

In both, there was, during convalescence, a sudden rise of temperature, which went up on both occasions to 101 3-5, and which lasted twenty-four hours; this occurred on the thirty-fourth day in the first attack, on the forty-sixth day in the second; that is, on the eleventh day of the convalescence the first time, on the fifteenth day the second time.

If we now turn to the symptoms, we find the following facts: In both attacks, there was during the first days slight sickness of the stomach, with occasional vomiting; there was diarrhea, the stools acquired the light ochre yellow or pea-soup color, in the second week the diarrhea turned to constipation; there was iliac tenderness, gurgling, moderate abdominal distension and meteorism, more marked the second time; there was a decided enlargement of the spleen.

In both, the kidneys, lungs and heart remained free, although the pulse was somewhat more rapid during the second attack, 110 to 120 against 98 to 104 in the first; no bronchial râles were ever heard even at the very base.

In both, there was slight epistaxis, but no intestinal hemorrhage in either case.

In both, the patient was perfectly rational during the day, but somewhat delirious at night, talking during sleep or being lost on awakening.

Both ended by critical sweating, more profuse in the second, and extending over a longer period.

These are the resemblances.

But there are some points of difference.

In the first attack, the patient was somewhat listless and apathetic; it had, although in a mitigated degree, the characteristic hebetude; it had slight tremulousness of the tongue and hands; it became decidedly deaf; the nervous centers were unquestionably impaired and dull.

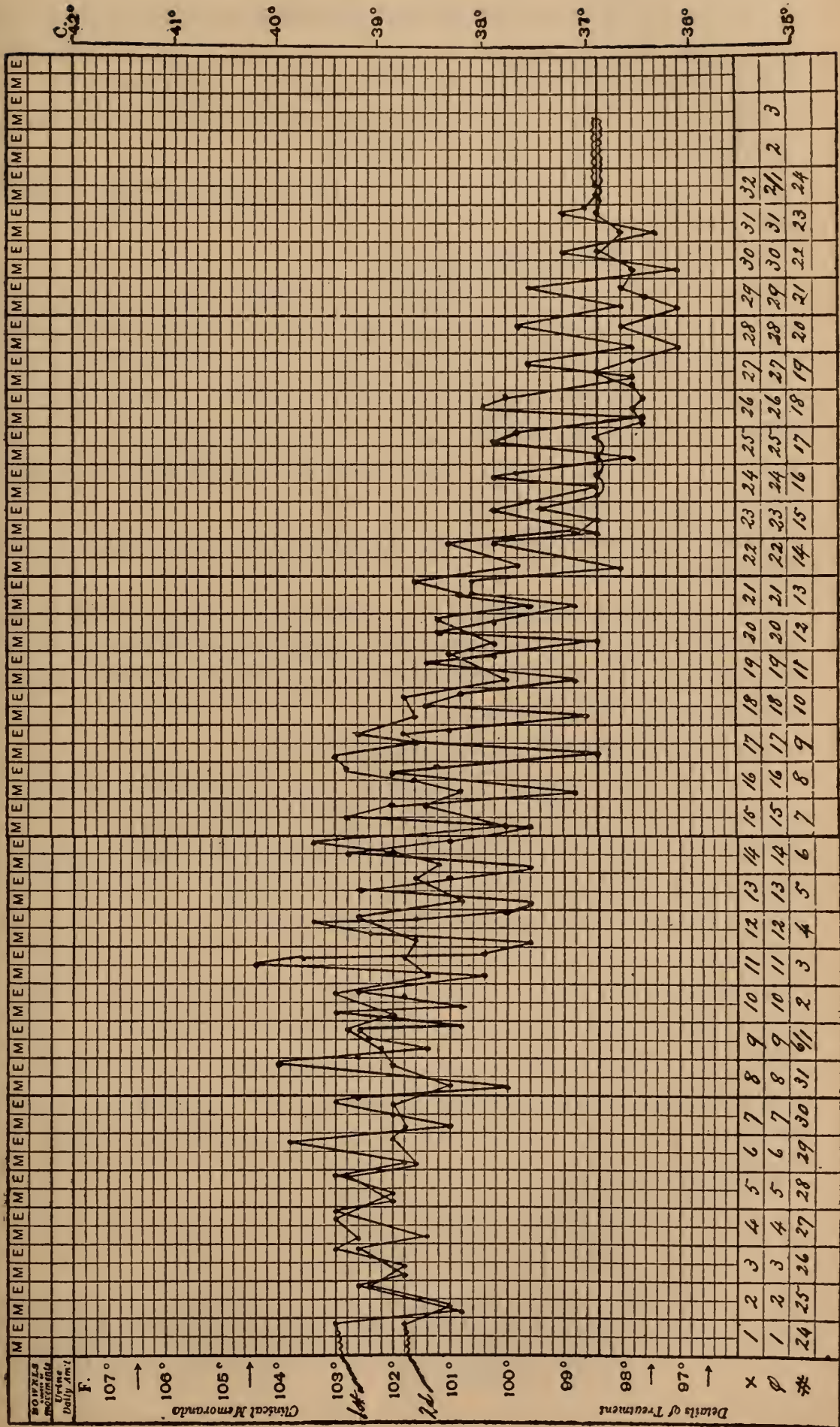
In the second, the sensorium remained perfectly clear and bright, the mind did not lose any of its alertness, and every movement was readily performed.

To illustrate Dr. Archambault's Article, "A Typhoid Temperature Chart"

Albany Medical Annals, August, 1899.

The two CHARTS in the case of Anna K., aged 13 years, school girl.

DIAGNOSIS: Typhoid fever in first. Recidivation—or what?—in second. RESULT: Restoration to health in both.



x From the first day of bed keeping or attendance. y Dates in first attendance: 1898, January. z Dates in second attendance: 1898, May.

Again, while in the second attack there were sudamina, there were none in the first; but in the first we observed lenticular rose-colored spots, which were sought for in vain in the second.

These spots and the mental state establish the most striking differences between the two attacks.

All through the second siege of sickness, the attending physician felt most perplexed.

What was he now dealing with?

Was it some form of enteric fever, other than typhoid, septic in nature, such as we had some years ago, in the winter, some of the cases being termed "winter cholera," some others being much milder, all having followed in the footsteps of the "grippe," although they were attributed, by general agreement, to water impurity? By the way, no water here was or had been used unless Pasteur filtered and boiled.

Was it an acute miliary tuberculosis of the general and so-called typhoid form?

Or was it not the insidious advent of the always dreaded *tabes mesenterica*; primary tuberculosis of the intestinal tract being an occurrence not rare in childhood and more likely to follow typhoid fever than any other disease?

Could it possibly be again typhoid fever?

Four months made it absolutely late for a typhoid *relapse*, furthermore as the patient had since enjoyed good health.

Yet, by way of exclusion, everything else was disposed of, except a possible *recidivation* of typhoid fever.

Could two attacks of typhoid fever supervene so soon one after another?

In his whole practice, the writer had but two patients contracting typhoid fever twice, but this occurred in both at years of interval.* The fact, however, although rare, is not unknown, since, in one of his brilliant clinics at the "*Hôpital de la Pitié*," Jaccoud has taken occasion to give, concerning relapse and

* Notes on the two cases of recidivation mentioned here:

T. N., Police officer, now 36 years old.

1st. attack: October 1, 1880 to January 21, 1881; unconscious from November 12 to December 25.

2d. attack: March 9 to April 7, 1891.

Mrs. M. K.

1st. attack: March 19 to June 9, 1893, during which a pediculated fibroid from uterus, felt free in abdomen, was made out, for which she was addressed, in July following, to Dr. Vander Veer.

2d. attack: January 31 to March 1, 1897; fibroid there, but smaller; patient at menopause.

recidivation, the following differential definition (*Abeille Médicale*):

“By *recidivation* is meant a repetition of the disease in the same individual, but at the end of several months or of several years, so that they are in him two sicknesses separated by a perfect state of health of more or less duration.”

“The *relapse*, on the contrary, is the repetition of the disease during the period of convalescence without the interposition, between the two morbid acts, of the period of the normal health state which divides the first sickness from the one of recidivation.”

Thus, in that lecture, drawing conclusions from a statistics of over 70,000 cases, Jaccoud asserts, as his personal experience, that the same subject can suffer from typhoid fever twice *at an interval of months only*.

To give support to the view that we were in presence of one of those rare cases, but especially in the hope of clearing up the diagnosis, a blood sample (after the dry method of Wyatt-Johnson) was sent to Dr. Blumer, of the Bender Laboratory, that the Widal test might be applied. This was on the eighth day of the disease. Another sample was sent on the thirteenth day, and one more on the twenty-seventh day, so as to cover the different phases, as recommended by Widal. Dr. Blumer promptly investigated and kindly replied that at no time could the loss of motility and the reaction of agglutination (with the Eberth's culture) be observed. With the second specimen, at a low dilution (1 in 10), there was a partial reaction, *i. e.*, the bacilli agglutinated, but they remained actively motile; with a dilution of 1 to 50, there was no reaction whatever. With the first and third specimens, the reactions were absolutely negative. To use Dr. Blumer's own words: “I should consider the evidence as against the case being one of typhoid fever, that is, as far as the Widal reaction is concerned. Partial or even complete agglutination may take place with sera of low dilutions from normal individuals who never had typhoid fever, and on the other hand it is very seldom that we find a case of typhoid that does not agglutinate at one to fifty.”

At this point, the case had reached beyond the twenty-seventh day of its course, and was safely steering towards recovery.

Therefore, if the Eberth bacillum could be excluded as an etiological factor, as well were to be excluded tabes mesenterica and acute miliary tuberculosis.

Then, what was it from which the patient had recovered?

It could not be thought to be pernicious anæmia, nor did it seem to bear any relation to the other blood diseases: leukemia, pseudo leukemia infantum and Hodgkin's lymphatic anæmia.

It is true, examination of the blood was not had with that differential diagnosis in view, but nowhere were the lymphatic glands involved; the liver was not affected; the patient lacked the particular skin hue of pernicious anæmia as well as the characteristic bleached pallor of leukemia; there were no cordio-vascular symptoms; on the contrary, the heart preserved throughout remarkably clear normal sounds; even the temperature had nothing of the irregular and intermittent elevations noticed in those diseases whenever temperature is a factor in them; finally, the patient recovered, a termination not usual in either disease, and recovery took place without any special therapeutic exhibition, especially with regard to arsenic in high doses and inhalations of oxygen.

Then, again, what was this second disease?

In aspect and in course, it resembled the first.

It was considered in the same light, it was treated in the same way, it passed off in the same manner.

What was it?

Clinical evidence would indeed create the impression that it was typhoid.

Bacteriological evidence said: It was not.

What was it?

I do not know.

Thus, do I know of a patient who was sick and got well of what to this day I do not know.

It is not the only instance.

56 CONGRESS STREET.

ANOMALY OF THE LONG TENDON OF THE BICEPS MUSCLE OF THE ARM.

Reported for the ALBANY MEDICAL ANNALS

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The following anomaly of the long tendon of the biceps muscle of the arm is believed to be of sufficient interest to warrant its being made a matter of record:

The anomaly was found in a dissecting-room subject in the Albany Medical College and in the left shoulder joint of a man evidently a laborer, about middle life and of strong muscular development. The shoulder joint on the right side was normal in all respects, the long tendon of the biceps passing through it in the usual way surrounded by the usual synovial sheath and supported in front by the thickening of the capsule which is sometimes called the gleno-humeral ligament (Flood's). The anomaly was on the left side alone. On this side the long tendon of the biceps of the arm was not found within the shoulder joint in any part of its length. The transverse ligament usually found between the tuberosities of the humerus was much thickened and was intimately blended with the insertion of the biceps tendon immediately behind. This ligament was also prolonged downwards, was much thickened and laterally was attached to the margins of the bicipital groove, gradually blending below with the deep fascia. The long tendon of the biceps starting below at the belly of the muscle, proceeded upwards along the bicipital groove, but instead of being free within it as is usual and surrounded by a synovial sheath, had little or no investing synovial membrane, and gave off strong lateral fasciculi, which became gradually blended with the transverse ligament and were finally attached to the margins of the bicipital groove. So the tendon proceeded until it reached the interval between the bicipital tuberosities, where it stopped abruptly, becoming intimately attached to the bottom of the groove and all the surrounding structures. There was no part of the tendon within the joint. Neither was there any trace of Flood's ligament. The supraglenoid tubercle was only a small nodule. In other respects the arrangement of the structures about the joint was normal. There was no evidence of pathological change in the joint, no thickening of the ligaments, no roughening of the synovial surfaces.

The arrangement must have been congenital.

Complete absence of the tendon of the biceps from within the shoulder joint must be very rare, and for this reason this case seems to be worthy of record.

Correspondence

BERLIN AS A MEDICAL CENTRE

Berlin, notwithstanding its phenomenal growth in every way, during the years following the Franco-Prussian War, has grown no more surprisingly than as a medical centre. Clinic after clinic has been established until now no German physician considers his medical education complete until he has taken at least one or two semesters in Berlin. The material is almost limitless and the means of making use of it is provided with lavish hands.

The Frederick-William University was founded in 1809, but long before that time instruction was given in medicine at the various hospitals and in the so-called private clinics. Besides the Napoleonic Wars going on at that time furnished great opportunities for ambitious young military surgeons. The Charité Hospital was founded in 1710 and is the oldest, as well as the largest hospital in Berlin, and it is here that most of the clinics, and instruction in the regular university courses are given. It has accommodations for between 1,500 and 1,800 patients.

The City Hospital was finished in 1874, and has room for 800 beds. It is built on the pavilion system, being one of the first hospitals ever built in that style, and is very conveniently arranged. It is not used as much for clinical instruction as the Charité, being on the outskirts of the city and a little unhandy to get at.

The University Obstetrical Clinic was founded in 1817, and the present building occupied in 1882. It is a fine, large building, three stories in height, and fitted up with all modern improvements and the latest surgical appliances.

Besides the hospitals, already mentioned, there are several more private institutions where clinics are held and instruction given. As for the clinics themselves they are of every kind and variety, and in every hour of the day, from six in the morning until seven at night a clinic of one kind or another is being held.

The Anatomical Institute is, next to the Charité, the oldest medical institution in Berlin. It, and the Charité, gave the

nucleus upon which the medical department of the university was founded. The Anatomical Institute was founded in 1713, three years after the Charité, primarily to give instruction to military surgeons. It became a part of the university in 1810. The institute is at present under the direction of Professor Wilhelm Waldeyer, under whom our own Dr. William Hailes was an earnest and faithful student at the beginning of his career. Professor Waldeyer is assisted by Professors Hans Virchow and Gustave Brocsike, prosectors; assistant, Professor Dr. Jablonowski; instructor, Dr. Kopsch and Professor Wilhelm Krause. The Anatomical Biological Institute was founded in 1858 and is at present under the direction of Professor Oscar Hertwig. The institute also has a biological anatomical department conducted by Dr. Robert Krause, an embryological biological department conducted by Dr. P. Roethig and a comparative anatomy department.

The Physiological Institute, which was founded in 1853, was originally a part of the Anatomical Institute but was separated from it in 1859 and has been a separate institution ever since. It is at present under the special direction of Professor Dr. Engleman. The make-up of the faculty is as follows: Microscopical department, Professor Fritsch, director; Dr. Bruhl, assistant; Special physiological department, Professor J. Munk, director; Dr. Paul Schultz, assistant; Chemical department, Professor Dr. Thierfelder, director; Drs. Neumann and Woener, assistants; Physical department, Professor Koenig, director; Dr. Abelsdorff, assistant.

The Pathological Institute, famous the world over, was founded in 1856, as a part of the Charité hospital, and has been under the direction of one man ever since its foundation, Professor Rudolf Virchow, than whom no name is more honored among the physicians and surgeons of the present day. Professor Virchow is assisted by a corps of very able men. Director of the chemical laboratory, Professor Salkowski; Custodian, Dr. Rudolf Jürgeus; assistant, Professor Oscar Israel, and instructors, Drs. Oestreich and Kaiserling.

The Pharmacological Institute was founded in 1871, and is at present under the direction of Professor Oscar Liebreich, assisted by Dr. Alexander Nangard as director of the experimental department; assistant instructor, Dr. W. Traube.

The Hygienic Institute was founded in 1883, and owes its birth to that famous scientist, Robert Koch, who continued at its head up to the fall of 1890, when Dr. von Esmarch took charge, he, in turn, being succeeded by the present director, Dr. Max Rubner. Two army and one naval surgeons are appointed each year to act as assistants in the laboratory.

The Clinical Institute for Surgery was founded in 1818 and has occupied the same place since its foundation. The present building was built in 1880-83 and the Poliklinik added in 1892. It is under the direction of Professor von Bergmann, the most famous surgeon in Germany, if not of the whole world at the present day. The surgical clinic of the Charité, although a good deal older than the above, is not nearly so well known. It dates from the year 1726 and is at present under the direction of Dr. Franz Koenig, who is rapidly bringing it to the front again.

The first medical clinic of the Charité was started in 1790 and is at present under the direction of Professor Dr. Ernest von Leyden, one of the most, if not the most, famous man on internal medicine in Germany to-day. This clinic was at one time called the Latin clinic, in contradistinction to the second of German medical clinic, because all the instruction was given in Latin. The second medical clinic grew out of a clinic which was started for diseases of the chest. It is also held in the Charité, and is under the direction of Professor Dr. Carl Gerhardt. The third medical clinic is likewise held in the Charité and was started in 1888, but is really a continuation of a clinic founded in 1810 by Dr. Christian Wilhelm Hyeland, physician to the Prussian royal family. The director at the present time is Professor Hermann Senator, with Drs. Kirstein and Rosin as assistants.

The university women's clinic has already been mentioned.

The obstetrical clinic, of the Charité, was started in 1878, and the gynecological department added in 1882. Both clinics grew out of the belief that the university Frauenklinik was too crowded and that there was room for another clinic. The correctness of this view has since been abundantly proven. The director of the clinic is Professor Gusserow, with Professor Dr. Nagel as assistant. Professor Nagel and Professor Hailes, of the Albany Medical College, were students in medi-

cine together in Berlin twenty-five years ago, and even at this late day there are some stories current of their doings, which might not bear the light of print.

Besides the clinics already mentioned there are also clinics for eye, ear, nose, throat, orthopedic surgery, nervous diseases, skin diseases, etc., all of which have been started within the past few years, and which are coming to the front more and more every year.

Women are admitted to some of the clinics, under certain conditions, but not until her sex is freed from some of the customs which now hem her in will she be enabled to pursue her medical studies with the same freedom which her American sister enjoys. ~

EDGAR A. VANDER VEER.

Editorial

Standardization of Drugs. — The frequent employment of the antitoxins — diphtheria, streptococcus, tetanus, — has shown the absolute necessity of a standard by which the antitoxic strength of the preparation used could be determined. One thousand units of antitoxin conveys knowledge of definite antitoxic power, regardless of the quantity of serum or the method of its manufacture. This determination of strength is made from animal experimentation where the conditions are as nearly similar as possible to those in the human subject. There is no reason why an effort should not be made to attain to the same exactness in other therapeutic measures. Much of the failure and most of the discredit which have fallen upon medicine are largely the result of this uncertainty which is ever present.

What would be thought of any mechanic who did not know the strength and power of the ingredients which he was compounding and what would be the inevitable result of his work? The same disastrous results would more often follow our work if it were not for the beneficent power of nature, who frequently makes good our mistakes and corrects our errors.

The physician has to contend with uncertainty in the

occasional idiosyncrasies of his patient, and should not be weighed down with continual doubt as to the active therapeutic strength of the drug he is employing. The pharmacopœia, in its last edition adopted the principle of standardization for opium, nux vomica and cinchona. In its next edition it certainly should extend this same principle to aconite, belladonna, calabar, gelsemium, veratrum and other drugs which, with their variability in strength, may be administered in desperate cases, in toxic, if not in fatal doses.

This subject is one that appeals strongly to every physician, and the revisors of the pharmacopœia will do well to insist upon this principle no matter what the cost may be or the difficulties which must be overcome.

Although the nineteenth century has seen
Osteopathy. the most marvellous advances in the science of medicine, it has not been free from vagaries, which are much more in harmony with the ignorance and credulity of the middle ages. These are apparently the recoil waves which are incidental and adjunctival to all advances in scientific methods. To-day Osteopathy is the medical folly militant. It has received special legislative favors in Missouri, its birth place; Vermont, North Dakota and Iowa, and has made a stubborn struggle for recognition in Massachusetts, Illinois, South Dakota and Minnesota.

It is a sad reflection on our boasted progress that a party whose fundamental elements are suggestion and massage, more than assisted by ignorance and boasting, should have made such headway, even temporarily, among people presumably intelligent.

Sweeney, in the *St. Paul Medical Journal*, has made some extracts from their standard text-book on medicine, a work sold only to the elect, for ten dollars. These sound like ridiculous medical jokes and prove their author to be an unconscious humorist who has unfortunately missed his true calling:

“Constipation is caused by the seventh or eighth rib being turned in so as to obstruct the free nerve wave over the great splanchnic.” It can be cured by “using the pectoralis major and the arm as a lever, placing the thumb in the angle

of the rib at fault and pressing hard as the arm is lowered, thereby throwing the rib into its proper articulation."

Many cases of heart disease are caused by a contraction of the adductor muscles of the thigh, obstructing the femoral artery or vein. Should the pressure be sufficient to obstruct the artery we have atrophy of the limb on the one side while the heart, overworked in trying to force the blood past the obstruction, soon feels the strain. In case the vein and not the artery is afflicted the blood is pumped into the limb and failing to escape properly, the anastomoses around the large joints become engorged, and perhaps we have a case of inflammatory rheumatism on the one side of the obstruction and heart disease on the other. In either case flex the limb against the abdomen, abducting the knee strongly and adducting the foot as the limb is extended, thus stretching the adductors and thereby freeing the circulation.

"Diphtheria is caused by a contraction of the muscles of the neck and thorax as well as by a contraction of the muscles of respiration, which interfering with the circulation of the fluids of the body cause the inflamed condition of the larynx, bronchial tubes and the throat. Diphtheria in its most malignant form has never in our experience failed to yield to treatment, instant relief being experienced and a complete cure effected in a very few days."

Mr. Dooley never wrote anything more absurdly ridiculous than this nonsense.

The catalogue of the 68th session, and
The Albany announcement for the session of 1899-1900,
Medical College. just issued, is in many ways an important
publication to those interested in the school.
The four-year course is now an established fact, and the
modifications of the curriculum are under consideration.
To those who have been disposed to complain of the ex-
tension of the course as an effort of the profession to limit
its membership, and a conspiracy of the medical colleges to
increase their attendance and income, an inspection of
the program of instruction will prove enlightening. The
demand for physicians with better preparation has long been
understood, and in the effort to meet it the medical course

has not only been lengthened, but has been improved, especially in the direction of more practical clinical work. The opportunity is now given the colleges under the law to introduce bedside instruction, and the graduated physician will feel competent to enter upon the practice of his profession without further delay in hospital work. It only remains for the state examining boards to appreciate this fact, and to avoid limited theoretical examinations which necessitate a course of cramming and book knowledge on the part of the candidate to the exclusion of the clinical experience which he is to be called upon to exercise as soon as he has obtained and registered his license to practice. In other words, with greater exactness in the admissions of students to the colleges, and a more extended and practical course during their undergraduate years, the need of post-graduate work ceases to be a requirement, but may be looked upon as a refinement and a resource for the practitioner, who after a few years, wishes to observe the methods of others, and to refresh his knowledge.

Several changes in the faculty are indicated in the announcement for the coming session. Dr. Balch, who is with the United States army in Cuba, has withdrawn from the professorship of medical jurisprudence and hygiene, and his subject has been placed in the hands of Dr. MacFarlane. Dr. Root has been appointed lecturer on the diseases of the throat and nose, and to Dr. Neuman's lectures on symptomatology, which he will continue, have been added lectures on the diseases of the stomach and intestines. The corps of instructors has been increased by the addition of Drs. S. L. Dawes, in the theory and practice of medicine; W. H. Happel, therapeutics; Arthur Sautter, dermatology, and W. H. Everett, embryology.

Scientific Review

The Ubiquity of the Typhoid Bacillus in Human Pathology.—The accumulated sense of a whole mass of insistent observation and experimental data bearing upon typhoid infection finds very fittingly its most precise expression in a comparatively unrestrained and facile conception of the role of the

typhoid bacillus in a series of processes apparently as unrelated in their clinical presentation as they are dissimilar in their pathological significance. As with the world of organic generation, so with that of intellectual production, nature makes no sudden starts. *Natura nihil facit per saltum*; and in the evolution of science broader and more comprehensive ideas are but the elaboration of still more primitive apprehensions. With the discovery of Eberth in 1881 and the succeeding determinations of Gaffky and others in the sphere of practice—the realization of powerful generalizations and intellectual forethoughts in a formula of discriminating activity and salient exactitude—certain definite limitations fixed themselves in the professional mind: the pathologic unity of typhoid infection was thought to be finally established.

The significant attitude of the critical investigations of the last ten years has tended to widen the horizon of interpretation by a more full realization of the ubiquity of this organism in human pathology. Although the appreciation of comparatively recent scientific results has served a more consistent and intelligent knowledge of typhoid fever the understanding of it and its etiologic factor, essentially in its fundamental principles, remains practically unaltered. The belief that typhoid infection results in enteric fever and its characteristic lesions is, in the abstract, as true now as it was then. The presence in typhoid fever of the organism in certain and definite tissues is true; however, investigators were not long in recognizing its existence elsewhere in organs and tissue remote from the original foci of infection.

Coexistent with the elucidation of this question of the dissemination of the typhoid bacillus in tissues commonly abnormal to it may be traced the development of the theory of blood infection. According to some the typhoid organism in almost every case at some time of the disease escapes into the general circulation. Significant of this mental tendency are the observations of Sanarelli,¹ Wright and Semple,² Smith³ and others. The latter three base their contention largely upon the fact that in the urine of many cases suffering from this disease they were successful in isolating the specific organism. Discordant with blood theory of infection are the bacteriologic results of the blood examinations of

typhoid patients, investigations which are only rarely answered in the affirmative. The explanation of this apparent discrepancy finds, suggestively, perhaps its solution in the experimental researches of Wyssakowitsch⁴ who showed that typhoid bacilli when injected into the blood of rabbits rapidly disappear from it so that at the end of a few hours they may only be found in the spleen. Moreover Welch and Nuttall in 1891 demonstrated the bactericidal properties of human blood serum for the typhoid bacillus. Despite all this, the typhoid bacilli have been occasionally cultivated from the blood both *in vitam et post mortem* by Bozzalo,⁶ Guarnieri,⁷ Wiltschour,⁸ Theimich,⁹ Teissier,¹⁰ Flexner,¹¹ Block,¹² Lartigau,¹³ James and Tuttle,¹⁴ and others.

The existence of bone lesions accompanying or following enteric fever is long since classic knowledge. The knowledge of the frequent dependence of these upon the invasion by specific bacillus is a development of comparatively recent date; for the present conception of this class of bone infection much is due to the publications of Orloff,¹⁵ Chantemesse and Widal,¹⁶ Parsons,¹⁷ Déhu,¹⁸ and others. The frequency of the typhoid bacillus in the osteomyelitis of this fever is well shown in the figures of Keen's collected cases,¹⁹ fifty-one in number. In thirteen the common pyogenic bacteria were found whilst the remaining thirty-eight contained the typhoid organism, either in pure culture or associated with other microorganisms. Wyssakowitsch² in experimental investigations observed how often the bone-marrow contained the bacilli; Chantemesse and Widal²¹ inoculated rabbits and found the typhoid bacilli only in the bones. Infection of the bone-marrow was also experimentally studied by Dmochowski and Janowski.²² That the bones offer a particularly rich soil for the typhoid bacilli is not surprising in the light of the above experiments. The late appearance of bone disease after an attack of typhoid fever in some cases is extremely interesting in showing the remarkable viability of this bacillus. Buschke²³ reports the history of a woman who fell ill of typhoid in October, 1886. Two months later she complained of swelling, pain and tenderness in the fifth and sixth ribs and cartilages on her right side. The pain and tenderness disappeared but the swelling

remained. In December, 1893, without any evidences of reinfection the pain returned but again subsided. On admission to the hospital in February, 1894, there was a soft fluctuating swelling below and to the inside of the right breast about the size of a hen's egg. The abscess was incised and cultures taken from the pus contained the bacillus typhosus. Bruni observed a woman of thirty-six who, in 1889, after typhoid developed osteoperiostitis of the right femur with tenderness over the left tibia. Six years subsequently an osteomyelitis appeared in the latter bone and from the pus Eberth's bacillus was also obtained in pure culture. Finally Chantemesse²⁵ has described a case of abscesses of the right tibia, left femur, left ulna and a little finger containing the bacillus typhosus four years after the attack of fever.

Disease of the middle ear, although not uncommon as a result of typhoid fever, is generally attributable to invasion by the common pus bacteria. But in cases published by Destree²⁶ and Vincent²⁷ it was found in the discharge from the ear. Janowski²⁸ in 1895 described two instances of typhoid infection of the parotid gland, one of which was a young man who died in the second or third month of the fever. Disease of the thyroid gland has been associated in a few cases with infection of a the typhoid bacillus, as shown by the reports of Kummer and Tavel,²⁹ Dupraz,³⁰ and Colzi.³¹

The circulatory system is no less free from the effects of the typhoid bacillus than some other tissues. Viti³² in 1890 found the bacillus of Eberth in the granulations of endocarditis. Vincent³³ published the history of a soldier who was undoubtedly free from previous endocarditis, but died from typhoid and in the vegetations on the mitral valve cultures contained the specific organism of typhoid fever. Lesions of the blood vessels the result of infection with the bacillus typhosus have been described by Quervain³⁴ and Haushalter.³⁵ One or two very rare instances of pericarditis have been described due to it.

Notwithstanding the frequency of the laryngeal complications of this disease, it is noteworthy that no case is yet on record in which the typhoid bacillus has been isolated from any process of the larynx associated with typhoid fever. Apart from those instances of general infection in which the bacillus of typhoid fever has been grown from the lungs, this

organism has been directly held responsible for some infrequent types of broncho-pneumonia, occurring in or following this disease. One of the very first regions in which the pyogenic possibilities of the typhoid bacillus was demonstrated was in the pleural cavity. Rendu and de Gennes³⁶ as early as 1885, and two years subsequently A. Fraenkel³⁷ succeeded in isolating it from cases of purulent pleuritis. In 1891 Charin³⁸ reported a case of infection of the pleural cavity without any accompanying intestinal lesions. Other observations have been added to these particularly by French investigators.

Meningitis occurring from time to time in typhoid fever is sometimes directly attributable to infection with the organism of typhoid fever. Wolff³⁹ has collected 174 cases of meningitis in which bacteriologic examinations were made and finds that in 2.87 per cent. Eberth's bacillus was found. The three cases reported by Ohlmacher⁴⁰ are particularly valuable by reason of the careful microscopic and bacteriologic studies which were made.

In view of the anatomic relations of the gall-bladder to other foci the *raisons d'être* for infection of this viscus are very obvious. The frequency of its presence in this viscus has, however, only within comparatively recent years received recognition. Chiari⁴¹ from the bacteriological examinations of twenty-two cases of typhoid concludes that its presence in the gall-bladder is the rule. He found it there nineteen times. Councilman "regards the gall-bladder as one of the surest places to obtain a pure culture of the organism."⁴² Chiari,⁴³ Dupré,⁴⁴ Gilbert⁴⁵ and some others have done much to elucidate this subject of gall-bladder infection. Gilbert and Girode⁴⁶ first demonstrated the presence of the typhoid bacillus in suppurative cholecystitis in 1890. The persistence of it in this location is, indeed, remarkable, a fact of considerable importance inasmuch as processes may be started long after the disappearance of the typhoid fever. Dupré⁴⁷ relates the case of a woman from whose gall-bladder the typhoid bacillus was isolated six months after the attack of fever, and Chantemesse⁴⁸ in a similar case found it eight months after the fever. Von Dungern⁴⁹ in 1897 reported a case of infection of the gall-bladder from which the typhoid bacillus was grown fourteen years and a half after the fever. More recently G.

Brown Miller⁵⁰ published the report of a case of cholelithiasis in which it was found in the gall-bladder seven years after the fever. The presence of the typhoid bacillus in gall stones is interesting. Milian⁵¹ found it in pure culture in the gall stones and viscus of a woman on the sixteenth day of fever. Fournier⁵² found it frequently in gall stones and Gilbert and Domenicini⁵³ first positively identified the bacilli as the nucleus of them, an observation since confirmed by Hanot⁵⁴.

As the other tissues have suffered at times from the typhoid bacillus so the sexual organs occasionally have become the seat of infection. The bacillus has uncommonly been found in the testicle during the fever, not only when not inflamed⁵⁵ but also in orchitis and epididymitis. Gasser⁵⁶ in a case of orchitis without suppuration found numerous typhoid bacilli. A case of Girode's contained them also. Tavel⁵⁷ and Menetrier⁵⁸ have met with such examples. Girode suggested that the organisms reached these situations from the urine which not infrequently contains them. Like the male organs those of the female have not wholly escaped from this newly recognized pyogenic microorganism. Werth⁵⁹ grew typhoid bacilli from a dermoid cyst which had suppurated, and Keen⁶⁰ has reported a somewhat similar example of infection of an ovarian cyst. Invasion of the uterus is probably extremely rare. Dobbin⁶¹ not long since reported a case of this nature; Blumer's⁶² case was one of combined streptococcus and typhoid puerperal infection. Lartigau⁶³ likewise succeeded in isolating the bacillus of typhoid fever once in pure culture and a second time associated with streptococci from the uterus in two cases. The same writer in a case of multiple superficial ulcerations of the vulva in a young woman suffering from typhoid fever similarly found the bacillus in pure culture.

Although often shown to be present in many diverse organs and tissues, infections with the typhoid bacillus in situations commonly abnormal to it are to be regarded almost as a process of a secondary nature: primary typhoid infection outside of the common foci is limited to the reports of a very small number of cases, and some of these of doubtful nature.

AUGUST JEROME LARTIGAU.

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In Memoriam

IRA D. BROWN, M. D.

Dr. Ira D. Brown died, after a short illness, on the evening of June 23, 1899, at his home in Weedsport, N. Y. Dr. Brown was born in Sconondoa, Oneida county, N. Y., Sept. 30, 1830, and was consequently sixty-eight years of age. Shortly after his birth his parents removed to Vernon, in the same county, where he received his early education. At his father's request he studied law and was admitted to the bar in 1852, but his leaning was toward journalism and he speedily gave up the law to embark in newspaper work. His first venture was at Clinton, Oneida county, where he established a paper called the *Oneida Chief*, which he continued for a year. Then he started the *Northern Light* at Camden. After this he went to Oneida and edited another *Oneida Chief*. From Oneida he went to Utica and became the city editor of the *Morning Herald*, which was then published by Hon. Ellis H. Roberts, now United States Treasurer. He then accepted a call from Oswego, where he became editor-in-chief of the *Daily Times*. He took a prominent part in the campaign of 1856, stumping the county in the interest of General John C. Fremont, the first presidential candidate of the Republican party, to whose interest the paper was of course devoted. He was a delegate to the first Republican convention held in this State, and part of the platform was written by him and the other part by John Jay, of New York.

The strain of daily newspaper work was too heavy, and the study of medicine, which always had a singular fascination for Dr. Brown, was then taken up. He attended the Albany Medical College, where he was graduated with the highest honors the institution could bestow. He was the valedictorian of the class of 1865. On May 9, 1866, he removed to Weedsport, where he resided until his death.

For several winters he acted as Albany correspondent of the *New York Times*, and also as legislative reporter for the *Albany Evening Journal*, at the same time sending letters to

several other daily papers in various parts of the State. In 1871 he was elected Member of Assembly.

On June 16, 1877, the doctor and his son, H. D. Brown, began the publication of the *Cayuga Chief*, which he continued to edit to the time of his death. Dr. Brown was married on September 5, 1855, to Miss Mary J. Hunt, at Oneida, N. Y. His wife died from a severe attack of pneumonia on December 28, 1891. He leaves two sons, H. D. Brown, his partner, and C. F. Brown. He was a past master of Weedsport Lodge No. 385, F. & A. M., and an active member of the fire department, of which he was president for many years.

He was loved by his friends, respected by his enemies, and the elements of charity, truth and bravery were

“So mixed in him, that Nature might stand up
And say to all the world: ‘This was a man.’”

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY MEDICAL COLLEGE.—The catalogue of the Albany Medical College for the 68th session, and the announcement for the session 1899-1900, has recently appeared. It is a great improvement over previous catalogues, the press work being excellent, and contains cuts of the new Albany Hospital, Bender Laboratory and College building with interior views. A few changes have occurred in the teaching force: Dr. Herrick has become clinical professor of Railway Surgery; Dr. Arthur G. Root has become lecturer on Throat and Nose; Dr. Spencer L. Dawes has been appointed instructor of Theory and Practice of Medicine; Dr. William H. Happel, instructor of Therapeutics; Dr. Arthur Sautter, instructor of Dermatology, and Dr. W. H. Everett, instructor of Embryology. The term has been slightly lengthened, graduation day now being scheduled for May 2d, 1900. The new examination rules will be found very beneficial if carried out to the letter, and will prevent a few students from dragging back a whole class.

SOUTH END DISPENSARY.—This new dispensary is located in the old Samuel Schuyler residence, at the corner of Ash Grove and Trinity Places. Dr. W. G. Macdonald is in charge, and he has surrounded himself with the following corps of assistants: Drs. T. L. Carroll, W. H. Happel, C. F. Theisen, T. F. C. Van Allen, J. W. Wiltsie, Arthur Sautter and C. H. Richardson. The dispensary is solely for the relief of the poor and needy, and as the south end has a large percentage of the city's poor, the situation is well chosen. The building is three stories high; there are ten rooms for dispensary purposes and five for the apothecary and janitor. The operating room is on the upper floor and is large and well lighted.

DECLINE OF THE PLAGUE IN INDIA.—The *Indian Medical Record* for May 31st and other Indian medical journals, report a steady decrease in the mortality from plague, and at the present rate of decline it is expected that the third great plague epidemic for India will be a thing of the past.

TRAINED NURSES FOR EPILEPTICS.—Two and a half years ago, Dr. William P. Spratling, Medical Superintendent of the Craig Colony for Epileptics, at Sonyea, N. Y., established a training school for nurses. This school held its first graduation exercises June 5th, and a class of eleven, seven men and four women, were graduated. The course embraces the subjects usually taught in such training schools, special attention being paid to the care of epileptics.

HENDAYE SANATORIUM FOR CHILDREN.—Paris has recently opened a sanatorium for scrofulous and rachitic children at Hendaye, on the Gulf of Gascogne, near the frontier of Spain. This hospital will have over two hundred beds, in four parallel pavilions. All operations are to be done at Paris, and all the children will be allowed from three to nine months sojourn in the sanatorium at the expense of the city.

UNION MEDICAL SOCIETY.—The regular quarterly meeting of the Union Medical Society was held at Manchester, Vt., Tuesday, July 18th, in Music Hall, under the presidency of Homer Bushnell, M.D., of North Adams, Mass. This society is composed of members from the counties of Albany, Saratoga, Rensselaer and Washington in New York, Bennington county, Vt., and Berkshire county, Mass. The following program was carried out: (1) Osteo-Sarcoma, with presentation of a case, W. S. Phillips, M.D., Arlington, Vt.; (2) Scleroderma—Presentation of a case, F. C. Liddle, M.D., Dorset, Vt.; (3) Technique of Autopsies, H. O. Fairweather, M.D., Troy, N. Y.; (4) Convulsions of Infancy and Childhood, J. C. Shiland, M.D., Watervliet, N. Y.; (5) Typhoid Dysentery, W. L. Clark, M.D., Hoosick, N. Y.; (6) Antitoxine treatment of Tetanus, with report of a case, A. J. Rogan, M.D., North Bennington, Vt.; (7) Sunlight, Air and Water as Remedial Agents, D. D. Tarbell, M.D., Schaghticoke, N. Y.; (8) Pernicious Anaemia, C. E. Nichols, M.D., Troy, N. Y.; (9) Some rare cases in fifty years practice, S. A. Skinner, M.D., Hoosick Falls, N. Y.; (10) Immobilization in the Treatment of Fractures and Dislocations, M. D. Dickinson, M.D., Troy, N. Y.; (11) Treatment of Nasal Stenosis Due to Deflected Cartilaginous Septum, B. S. Booth, M.D., Troy, N. Y.; (12) Histories of Three Cases and Illustrations of 1, Lead Colic; 2, Intestinal Obstruction; 3, Appendicitis, D. W. Houston, M.D., Troy, N. Y.; (13) Appendicitis, J. L. Archambault, M. D., Cohoes, N. Y.; (14) A Few Instructive Cases of Appendicitis, C. B. Herrick, M.D., Troy, N. Y.; (15) Medical Libraries, A. D. Davidow, M.D., Troy, N. Y.; (16) Report of a Case, F. W. Goodall, Bennington, Vt.; (17) Opacities of the Vitreous, W. B. Sabin, M.D., Watervliet, N. Y.

DELAWARE STATE BACTERIOLOGIC LABORATORY.—There has recently been established by the State Board of Health of Delaware a new bacteriologic laboratory, to be located at the State College at Newark, Delaware. The aim will be to carry on original investigations with a view of furthering

the progress of sanitary science in general and bacteriology in particular, and to assist the physicians of the State in the diagnosis of typhoid fever, diphtheria, etc. Professor Chester, the State Bacteriologist, has been appointed director, and Dr. A. Robin, bacteriologist and pathologist to the laboratory.

ANOTHER FAITH-HEALER CONVICTED.—We are indebted to the *Medical News* of June 24th for the following item: "Mrs. Maria Müller, the so-called sympathetic healer, who treated twelve-year-old Dora Kranz for gangrene of the left foot, was tried on June 5th before Judges Fitzgerald, Keady and Fleming, in the Court of Special Sessions in Brooklyn, and was convicted on the technical charge of practicing medicine without a license and sentenced to five months imprisonment. Mrs. Müller treated Dora Kranz by means of a 'black salve,' the application of which was accompanied by incantations. Finally, after much valuable time had been lost, the child was taken from her hands and removed to the Eastern District Hospital, where her limb was amputated above the knee joint, May 6th. The child is now well." Let the good work go on until the people are convinced of the utter worthlessness of the sect and the treatment which it carries out.

DISTINGUISHED VISITORS TO AMERICA.—In the decennial celebration of Clarke University, Worcester, Mass., which commenced July 5th, several distinguished foreign scientific men have taken part. M. Emile Picard, professor of mathematics at the University of Paris; Ludwig Boltzmann, professor of theoretical physics at the University of Vienna; Angelo Morso, professor of physiology at the University of Turin, best known perhaps for his work in recent years upon the ductless glands and especially upon the interesting questions involved in the parathyroid glands and their relation to the thyroid and to the general nutrition and metabolic processes of the organism; Santiago Ramon y Cajal, professor of histology at the University of Madrid, practically the only Spanish member of the medical profession whose work is known outside of the confines of Spain and almost the only Spanish scientist who in our generation has made in any line distinct contributions to scientific knowledge. His investigations into minute nervous anatomy have attracted world-wide attention. August Forel, late professor of psychiatry at the University of Zurich, was also present.

THE AMERICAN MEDICAL QUARTERLY.—In June there appeared the initial number of the *American Medical Quarterly*, a magazine of the medicine of to-day. As a frontispiece appears a photogravure of Dr. Joseph McDowell Mathews, President of the American Medical Association for 1899. The list of writers is certainly an excellent one, containing the names of Drs. Mathews, Hobart A. Hall, Matthew D. Mann, Charles A. L. Reed, William C. Krauss, Lawson Tait, Ernest Wende, Charles B. Nancrede, John O. Roe, George Henry Fox, Albert Vander Veer and Willis G. Macdonald. It is needless to remark that the papers by these well known men are of a high standard and the *Quarterly* is to be congratulated on securing such a list of able collaborators.

We would particularly mention the article by Drs. Vander Veer and Macdonald, which is elaborately illustrated with colored plates. If this initial number is a fair sample of what is to follow, we can surely predict a bright future for this new quarterly.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—This Association will hold its ninth annual meeting at Washington, D. C., September 19, 20, 21, 1899. The president, Dr. F. B. Bishop, appointed the following committee of arrangements: Drs. D. Percy Hickling, chairman; Jos. Taber Johnson, G. Lloyd Magruder, Z. T. Sowers, Robert Reyburn, G. Betton Massey, Charles R. Luce, Elmer Sothoron, Llewellyn Eliot, Clifton Mayfield. Willard's Hotel has been chosen for the headquarters and special rates have been made for all interested in this meeting. Many able papers have been promised and a very successful scientific meeting is assured. There will be a large and varied exhibition of electro-therapeutic apparatus in Willard's Hall during the meeting of the Association. The committee also promises a very pleasant social program, including a reception by the President of the United States, an excursion to Mt. Vernon, Arlington and Alexandria—a buffet lunch to be served at Alexandria—an evening visit to the Congressional Library, to be viewed under an electrical illumination. Provisions have also been made to visit the War, State and Navy Departments, the United States Treasury and other public buildings.

PERSONAL.—Berthier W. Mather, A.B., M.D. (A. M. C., '99), has been appointed resident physician and surgeon in the St. Mark's Hospital at Salt Lake City, Utah. Dr. Mather left for the west about June 1st.

George S. Towne, M.D. (A. M. C., '99), has been appointed interne in the Hartford (Conn.) City Hospital, and will enter upon his duties September 1st.

Dr. August Jerome Lartigau, lecturer on Clinical Microscopy and Assistant Director of the Bender Hygienic Laboratory, has been appointed tutor in Pathology in the College of Physicians and Surgeons of Columbia University, New York City. Dr. Lartigau will begin his work there in the fall.

Dr. and Mrs. Vander Veer and their youngest son, Garret, sailed for Holland, July 16th, where they will spend several months. Dr. Vander Veer will attend the third International Congress for Gynæcology and Obstetrics, which will be held at Amsterdam from the 8th to the 12th of August.

Dr. and Mrs. James P. Boyd left for an extended tour through Europe July 9th.

Dr. Andrew MacFarlane will spend several months studying at Erlangen and Berlin. He sailed from New York, July 12th.

Dr. G. Alder Blumer, well known for years as the superintendent of the State Hospital at Utica, has decided to accept the position of superintendent of the Butler Hospital for the Insane at Providence, R. I. This is considered one of the most attractive appointments in this branch of hospital practice, and the Butler Hospital is to be congratulated on securing such an able and efficient man as Dr. Blumer for its superintendent. Dr. Blumer has been Adjunct Professor on Insanity in the Albany Medical College for some years and it is to be hoped that he will still continue his work here.

MARRIED : TRAVELL—DAVIDSON.—At Albany, N. Y., Dr. J. Willard Travell (A. M. C., '97) of New York City, and Miss Janet Davidson, of Albany. After the wedding tour, Dr. and Mrs. Travell will reside at No. 55 East Eleventh St., New York City.

LEONARD—CONKLIN.—At Auburn, N. Y., Dr. Walter A. Leonard (A. M. C., '99) of Hoosick Falls, N. Y., and Miss Evelyn Conklin, of Auburn, June 29. Dr. and Mrs. Leonard spent their honey-moon in the Thousand Islands. They will reside at Hoosick Falls.

Book Reviews

Electro-Hæmostasis in Operative Surgery. By ALEXANDER J. C. SKENE, M.D., LL.D. Eighty-two illustrations, including two colored plates. Pp. 169. New York, D. Appleton & Co.

The author states in the preface that this book is issued as a supplement to the third edition of his work on the diseases of women, but it is a valuable contribution in itself and should be read by general surgeons as well as gynecologists. The most interesting portion of the work is contained in the first one hundred and thirty-five pages and relates to electro-hæmostasis, while the remainder deals with asepsis and antisepsis, including hospital construction as well as operative technique. Dr. Skene admits that in electro-hæmostasis he is advocating a radical departure from established surgical procedure, but claims on theoretical grounds and by experimental and clinical results that the departure is a decided improvement. The disadvantages of ligatures are described and it is shown that most of them are done away with by the author's new method. Forceps are used in which there is a resistance wire connected with a storage battery or stem-current which heats the blade sufficiently to desiccate the tissues without charring them. The principal advantages claimed for the method are that vessels and lymphatics are completely closed, the stump is the smallest possible, and there remain no raw surfaces or foreign bodies.

The important gynecological operations are described in detail as modified by this change in method which is applied not only to blood vessels but also to Fallopian tubes, the appendix and neoplasms of different kinds. The subject is one worthy of the attention of surgeons, for, if the results obtained by Dr. Skene become common, second and third operations will become less frequent. The technique requires practice, but does not seem particularly difficult nor likely to greatly prolong operations.

R. G. Cook.

The Diseases of the Nervous System: A Text-Book for Physicians and Students. By Dr. LUDWIG HIRT, Professor at the University of Breslau. Translated, with permission of the author, by AUGUST HOCH, M. D., formerly Assistant Physician to the Johns Hopkins Hospital, now to the McLean Hospital, Waverly, Mass., assisted by FRANK R. SMITH, A. M. (Cantab.), M. D., Instructor in Medicine in the Johns Hopkins University. With an introduction by WILLIAM OSLER, M. D.,

F. R. C. P., F. R. S., Professor of Medicine in the Johns Hopkins University, etc. With one hundred and eighty-one illustrations. New York: D. Appleton & Co., 1899.

Although not indicated on the title page, this is the second edition of this work, the preface to the second German edition, printed in 1894, being reproduced. Few changes have been made. There have been a few additions to the illustrations, and some minor revisions to the text. The first edition was well received by American readers, and Dr. Hirt's book has earned a well-deserved reputation as a clear and in some respects ingenious exposition of the subject of nervous diseases. It is somewhat difficult to escape the beaten path in a subject with such extensive literature as that of neurology, but this book presents a refreshing and acceptable originality. It may be unreservedly commended to both specialists and general practitioners for the conciseness with which diagnosis and treatment are discussed.

Guy's Hospital Reports for 1896. Edited by E. C. PERRY, M. A., M. D., and W. H. A. JACOBSON, A. M., M. Ch. Vol. LIII, being Vol. XXXVIII of the Third Series. Published by J. and A. Churchill, Great Marlborough Street, London, 1898.

It is a pleasure to be able to recommend successive volumes of a work which has continued to run for over fifty years. Vol. LII of this series received our highest commendation and we do not hesitate to commend this volume as heartily. It contains ten papers, five of which were written by the faculty of the hospital; the remaining five were communicated by the editors. Each paper is excellent, written in a high plane of thought and based upon thorough knowledge and acute observation.

A list of specimens added to the museum during the year is given. Each specimen is described and a brief history of the case given.

A Review of Recent Legal Decisions Affecting Physicians, Dentists' Druggists and the Public Health. By W. A. PURRINGTON, of the New York Bar. Published by E. B. Treat & Co., New York, 1899.

The title is a pretty clear explanation of the contents of this little work, which will undoubtedly prove valuable as a reference book to those members of the profession interested in the relations of medicine to the law; not only that, but it should be valuable to *every* member of the profession for it is a fact that from year to year medicine and law are becoming more closely related. The final chapter is a reprint from the *Medical Record* of an interesting article by the author on "Manslaughter, Christian Science and the Law."

The Journal of Tuberculosis: A Quarterly Magazine Devoted to the Prevention and Cure of Tuberculosis. Edited by KARL VON RUCK, B. S., M. D. Published at Asheville, N. C.

We are in receipt of the second number of this journal and do not hesitate to express our approval of the idea of publishing a periodical devoted entirely to this subject. It certainly has as broad a field as the subjects of Insanity, Neurology or State Medicine, which support numerous special

journals, and it is more vital to the interests of humanity than any one of these three.

The editor has our best wishes for his success in the special but boundless field which he has chosen.

Current Medical Literature

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Cysts of the Broad Ligament; their Diagnosis and Treatment.—J. M. MUNRO KERR, in the *Glasgow Med. Journal*, September, 1898, divides cysts of the broad ligament into three classes:

1. Cysts of the broad ligament more or less pedunculated.
2. Cysts in the broad ligament, but not occupying more than the upper two-thirds of that ligament.
3. Cysts extending deep down into the pelvis and ramifying in the connective tissue around the uterus, bladder and rectum,—the kind designated by Tait "embedded cysts."

Cysts of the broad ligament that can be diagnosed as such, by bimanual palpation, are those fixed in the broad ligament (those of the second and third classes). Such cysts can be felt firmly fixed and quite immovable close down to the vault of the vagina. The uterus, when the tumors are of any size, is always displaced over towards the opposite side. An accompanying forward displacement is not infrequent in those of the third class, from cysts extending into the cellular tissue behind the uterus. The differentiation by bimanual examination of cysts of the broad ligament from those of the ovary becomes more and more difficult and finally impossible as the former come to occupy a position in class 1.

Fluctuation is a feature of cysts of the broad ligament, which can only be made out in the larger cysts, particularly those of the first class. Under treatment, the author gives ligation of the pedicles and removal of the tumors in those cysts of the broad ligament that have become pedunculated, *i. e.*, of the first class. In those of the second and third class, which are more or less imbedded and fixed in the broad ligament and have no pedicles, removal is only possible by enucleation. The treatment for cysts of the third class, those imbedded deeply in the broad ligament, is likewise removal by enucleation. The best and safest method of treating the capsules after removal of the cysts, is the stitching of the margins of the capsule to the lower part of the abdominal wound and packing the cavity with sterilized gauze. The other method, that adopted by Martin, of Berlin, of stitching up the sac from the bottom, is not quite so safe, particularly if there is much hæmorrhage from it. The author also mentions the treatment by puncture and vaginal or abdominal drain-

age, and reports a case in which perfect recovery took place treated in this way. The objection to this operation is, that these cysts occasionally contain papillomatous growths in their interior. This difficulty can be always overcome by exploring with the finger the interior of the cyst through the puncture wound. If papillomatous masses are discovered, the cyst must be enucleated.

Pericarditis in Children.—BAGINSKY. Report in *Deutsche med. Wochenschr.*, Nov. 10, 1898. After a careful examination of over sixty cases in the Kaiser und Kaiserin Friedrich Hospital, the author comes to the rather astonishing conclusion that the disease is by no means rare in children; in fact, it occurs perhaps more frequently than in adults. Of these sixty cases, twenty-four had had polyarthritis rheumatica and twenty-four were tuberculous. The same forms of pericarditis were found as in adults:

1. *Serous form*: Of this form there were sixteen cases, usually ushered in with severe symptoms, rapid respiration and usually irregular, high temperature. Pulse variable, at times small and rhythmical (from 120 to 150), at times strong and normal. The diagnosis is difficult on account of the difficulty of making a precise percussion of the heart in children, and, furthermore, the area of dullness differs from that in adults; on account of the higher position of the diaphragm in a child, the position of the heart is higher, taking on more of a horizontal position; its beat is noticed somewhat outside of the mamillary line and the area of cardiac dullness merges into that of the liver. More important than the changes in the figure of the heart dullness, which makes it difficult to exclude positively a dilatation of the heart, are the pericardial murmurs heard on auscultation. These may be heard particularly over the upper part of the heart. Baginsky was only able to make out in separate cases the rushing sound heard at the apex and which, when present, is given by Rosenbach as a pathognomonic sign.

2. *Purulent exudate*: In this form, the diagnosis is even more difficult on account of the small amount of the exudate. Therefore the accompanying symptoms are of great importance. Temperature is very variable, at times normal, and then suddenly becoming very high. The physical signs are very uncertain. The tuberculous form, which the author has seldom seen, was always very virulent. The most important form is that occurring with polyarthritis rheumatica; in this, which is very frequent, the heart is often enlarged and adhesions between it and the pericardium are frequent. Under treatment, Baginsky got good results from the administration, together, of digitalis and diuretin, four to five grammes a day.

Infantile Dyspepsia.—O. KLEMM (*St. Petersb. med. Woch.*, 1898, No. 47) discusses this subject, basing his investigations upon the well-known differences in mother's milk, which is often far from normal and necessitates a clear distinction between that which is good and that which is poor. The former serves as a model for artificial nutrition, and the

latter shows how an artificial food should not be made. There are two ways of reaching a conclusion in a given case — clinical observation and chemical analysis. The writer's earlier conclusions (*Jahrb. für Kinderh.*, 1898, *Bd. XLVII*, 1), derived from the examination of mother's milk, showed, relatively to the duration of lactation, a relatively high percentage of sugar, small amount of iron, and no variation in the albumen. Dyspepsia occurred in cases in which the milk showed these conditions, and the question arose as to possible variations in the albuminous substances. It was found, as a general rule, that the milk of debilitated women was below the normal in casein; or, at all events, that the casein, in connection with the changes of the other components, especially the sugar, produced a special liability to disturbances of digestion. This conclusion might be summarized clinically, that deficiency in casein induces dyspepsia, and excess in casein leads to constipation.

But changes in the albuminous matters are not alone the cause of indigestion, and variations in the carbo-hydrates and in the fat are to be considered. All three constituents influence one another in their effect upon the intestine. If the cause of the dyspepsia is to be sought in the milk, a complete analysis of the latter is necessary. This includes not only a simple microscopic examination, which gives the number and size of the milk globules, but also the different forms — colostrum cells, incomplete fat globules, converted epithelium, organized cells which may be regarded as fat globules, and the epithelial count. In the routine milk analysis the following procedures are necessary:

- a. The microscopical examination.
- b. The specific gravity.
- c. The total albuminoids in percentages:
 1. Casein and reaction.
 2. Quantity of albumen.
 3. Nitrogenous residuum.
- d. Amount of fat, and dissolving point of the fat.
- e. Amount of sugar.
- f. Amount of iron.

This complete examination is practically of the greatest value, and should be resorted to in every case of dyspepsia occurring in an infant. The therapeutic management of the case may be successfully carried out with the knowledge gained from such analyses, and when this involves a change in nurses, the same consideration for the quality of the milk should be had.

NEUROLOGY

Edited by Henry Hun, M. D.

Sensory Disturbances in Hysteria and Epilepsy.—RICHTER (*Archiv f. Psych. u. Nervenkrankh.*, XXXI. 3) examined 71 cases of hysteria, 49 of epilepsy, and 8 of hysterio-epilepsy (the latter being cases of hysteria in which undoubted epileptic attacks occurred) with reference to the degree,

the frequency, the diagnostic significance of sensory disturbances and their relations to convulsive seizures. The examination included tests of the skin with the camel's hair brush, needle, and test-tubes of hot and cold water; and complete investigations of the conditions of the special senses. The conclusions derived from this series of investigations the writer summarizes as follows:

1. The concentric diminution of the visual field in hysteria and epilepsy is as a rule the result of subjective nervous and psychic disturbance.
2. Seizures, through their influence upon an already debilitated condition, increase the concentric shrinking of the field of vision.
3. The mental effect upon the patient of examinations with the perimeter tends to diminish the intensity of the symptoms and to induce a normal condition of the vision.
4. In all of the cases (128) an objective contraction of the visual field, independently of its relation to the disease present, was not observed.
5. The visual field for colors was not altered in these cases.
6. A transient alteration in the normal relations of the colors was observed in one case.
7. No form of sensory disturbance, including hemianæsthesia, has, *a priori*, any differential significance in hysteria and epilepsy.
8. Any regular development of anæsthesia after attacks of hysteria is not proved; sensory disturbances are apt to appear and to diminish in relation to improvement or deterioration in the general condition.
9. Sensory disturbances appear irregularly after epileptic attacks and are infrequent and without stability.

Trophic Degeneration of the Vessels Following Peripheral Neuritis.—LAPINSKY (*Arch. de Med. Exper.*, January, 1899), reports two interesting cases under the above title.

He mentions that cases of this kind are rare, and reports cases of Potain, Walsham, Huchard, Fraenkel, and others in which some lesion of the peripheral nerves was followed by changes in the blood vessels.

In one of his cases a man who had an alcoholic history, and who developed symptoms of a general peripheral neuritis, showed gradual enfeeblement of the circulation in the extremities followed by partial gangrene of the toes. The vessels of the extremity were to be felt as thickened cords, and microscopic examination showed an obliterating endarteritis. A neuritis was also shown to exist. In the second case there was a neuritis of one leg and arm with an ulcer on the sole of the foot. The author discusses thoroughly the question as to the original lesion in the cases, particularly with regard to the question as to whether the vascular lesions may not have preceded the nervous ones; but seems to show both by the course of these cases, and also by his observations of cases with old vascular lesions that the nervous lesion is the primary one.

An Acute Myxœdematous Condition.—Under the title "An Acute Myxœdematous Condition, with Tachycardia, Glycosuria, Melæna, Mania, and Death," Dr. OSLER reports an interesting case in the *Journal of Nervous and Mental Disease*, February, 1899. The patient was a man of good

family and personal history, *aetat.* 31., whose weight increased from October, 1896, to January, 1897, from 145 to 182 pounds. Later he became restless and entertained certain delusions, his skin became dry and harsh, and a red rash appeared, his general appearance became bloated, and his face congested and purple, the eyes a little prominent, but without Graefe's sign or retraction of the lids or impairment of power of convergence; the neck looked thick and brawny; the supraclavicular pads were large and the lower part of the sternal notch was obliterated; there was no prominence in the region of the parotid, and the gland could not be felt. The abdomen enlarged so rapidly that it split the corium in the inguinal region in wide crescentic lines. Attacks of diarrhoea and marked irritability of temper were the only additional symptoms of moment. The pulse increased to 120 and later to a higher number, he developed tachycardia and glycosuria, became excited and delirious, and in March died of exhaustion. The skin did not pit, but was infiltrated and firm, and had to be picked up in large pieces, particularly over the backs of the hands and over the cheeks, everywhere a very solid infiltration. During the last part of his life the symptoms were those of the toxæmia of acute exophthalmic goitre, viz., tachycardia, slight tremor, delirium and diarrhoea. The most reasonable interpretation of the case is that there was a perversion of the function of the thyroid gland, resulting in a toxæmia, which presented some of the features of myxœdema and some of Graves' disease.

Dr. Osler suggested that, as sudden death follows the operation of thyroidectomy, it would be interesting to learn whether there is any enlargement of the lymphatic glands and the thymus; it is possible that in such cases there may be a condition of so-called status lymphaticus, in which it is known that sudden death occurs.

Cerebral Hæmorrhage.—KELYNACK AND BYTHELL, in the *Medical Chronicle*, September, 1898, give the following summary of an analysis of seventy cases of Cerebral Hæmorrhage:

(1) Hæmorrhage in a little over four per cent. of all the fatal cases at the Manchester Royal Infirmary; (2) It occurs much more frequently in the male sex, three and a half times as often; (3) Age varies from 15 to 76. The average in males is 48.93, and in females 54.53; (4) The clinical features are variable, but are generally sudden in onset, with rapidly developing unconsciousness; (5) Atheromatous state of the vessels is the most frequent etiological factor. Atheroma, granular kidney, or both, were noted in 82 per cent., and cardiac hypertrophy in 57 per cent.; (6) The age varies with the etiological lesion. The highest average, 57.18 years, is reached in atheroma and granular kidney, but it is only 34.6 years in hæmorrhage with malignant endocarditis; (7) The right hemisphere was affected in 41 per cent., the left in 56 per cent., and both in 3 per cent. In 76 per cent. the lesion was situated in the basal ganglia and internal capsule; (8) The commonest secondary conditions are of a pulmonary and vascular nature; (9) Duration of life varies from a few minutes to nearly three weeks, about 70 per cent. ending fatally in the first three days. The duration depends to some extent upon the seat of the lesion, but not so much as might be expected.

ALBANY MEDICAL ANNALS

Original Communications

THE PSYCHOLOGY OF CRIMINALS, AND A PLEA FOR THE ELEVATION OF THE MEDICAL SERVICE OF PRISONS.*

By JOHN B. CHAPIN, M. D.,

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Philadelphia.

Criminals have been the subject of study of their heredity, habits, degree of education, physical and congenital defects, occupation, eccentricities, so far as they may indicate degeneracy—all for the purposes of ascertaining any possible relation these conditions may have to crime, or the sources from which it proceeds. Further analysis of criminal acts shows that they also originate in arrested development of the moral sense, from natal and prenatal conditions. As a result of ignorance, depraved associations, intemperance, vicious habits, low-living, the moral sense may also be obtunded, or in a state of absolute suspense. Criminal tendencies may be inherited and transmitted, as they may also be acquired by suggestion, imitation or habit. If the moral sense is impaired, or lacking, the baser human passions inevitably come to have supreme sway. Fear and anger, hatred and malice, envy and revenge, covetousness and avarice are some of the manifestations of those human passions that, uncontrolled or unmas-

*Presented to the International Prison Association, Belgium, 1899.
Read before the American Medico-Psychological Association, May 24, 1899.

tered, have been at some period the cause of every form of crime in the calendar.

It is beyond comprehension, and contrary to experience, that a person with a well developed and active moral sense would proceed deliberately to commit a crime. When it does occur, it is explainable on the hypothesis that the ordinary safe-guards—a keen, active moral sense, and a controlling will-power, have ceased to act.

For the purposes of classification, the reports of some prison establishments furnish tables of crimes committed by convicts, which are grouped as offenses against the peace of the state, the person, or property. They are, rather, the measure of varying degrees of degeneracy, and do not show the motives and hidden springs of action underlying the criminal acts which might be the basis for a study of the psychology of crime. As human physical organisms are subject to degeneration, so it may be said of the moral and mental faculties that they may weaken and degenerate. A crime that in itself may be punished with a slight penalty, may yet on a psychical examination of the convict show an extreme depth of innate depravity. On the other hand, grave crimes do not necessarily indicate the lowest criminal instincts. As a result of common observation they are often found to have been committed by persons, who, while possessing active moral susceptibilities, have been overcome by some sudden psychical explosion of rage, or some other passion of brief duration, yet under prison discipline they are found usually to be tractible and dutiful. It is misleading to classify criminals solely according to the nature of the crimes committed, and some other basis must be found for more careful study of these cases. It would be most helpful also to the student of penology if some principle could be evolved from the mass of information furnished by prison establishments, the experience of wardens, and other officers that would tend to the best management of prisons, as well as the prevention of crime.

It is assumed that anyone may propose a classification of convicts, but it will be accepted only so far as it is in accord with general experience. For present purposes it is sufficient to found a classification based on the mental, moral and

physical characteristics of convicts such as may be disclosed by their history and on examination.

The word incorrigible is defined to mean "Depraved beyond the possibility of reform," and has been fitly applied to a small pestiferous group readily recognized in every convict community. The *incorrigible convict* is an habitual criminal, but he is much more. He is morally depraved from long indulgence in vice and crime, and has lost the little moral sense he may have once possessed. He is at enmity with society and every organization calculated to preserve social order, property, or human life. In the prison he defies its authority, antagonizes its discipline, and submits to its punishments but his spirit of resistance is not broken. The pestiferous example of such a spectacle in a congregate prison establishment is a most serious menace to its order and discipline. He never reforms nor improves; is destitute of the moral faculties on which a new character may be constructed, but is mentally cunning, designing, irritable, and dangerous. The lineaments of his face or form show too often the stigmata of moral and physical degeneration. The number of cases to be placed in this class is fortunately not large—a careful examination in one of the populous states showed that only three per cent. might be reckoned in this category.

Habit-Criminals; or Habitual-Criminals. Habit is a "Tendency or inclination toward an action which by repetition has become easy, or even done spontaneously." An habitual criminal would be therefore one who has such an inclination to commit crime that the repetition of his criminal acts has become easy—or the crime is done "spontaneously." The term is good enough because it recognizes the well-known inborn or acquired tendency of the human mind to act in certain lines which become somewhat established, or fixed by frequent repetition. Habits of good and evil living are formed in early life. The moral sense is developed and strengthened by a course of decent living and strict adherence to moral precepts. Habits of industry, sobriety, orderly living, and morality become fixed by repetition, and united make for social order. Habits of vice, laziness, immorality, low-living, and criminality are equally confirmed by indulgence and repetition, and make for social disorder and endanger society.

As it has been alleged that at an early age there can be made a fair forecast of the life of a child, so do the early evil propensities of youth crop out and foreshadow the coming criminal tendencies of manhood unless better habits can be made to take the place of evil ones. All reformatories work on the hypothesis that they may prove to be corrective on the principle that they create in their wayward wards wholesome activities—so that new habits of living and acting may take the place of evil and criminal tendencies. The statistics of these institutions relate to a class of offenders who are charged with their first offense, and usually are minors. They have an interest because they have a bearing on the beginnings of crime, and the *formation of a crime-habit in the young*. The work of the reform establishments for the young is to reach down into the soil, that is the source that produces the habitual criminal class, and there prevent the formation of a crime-habit, or to break it if it is already formed.

A reference to the statistics of 8,319 inmates of the New York State Reformatory at Elmira, New York, has a special application to this branch of our subject.* The administration of this institution during twenty-two years has pursued a uniform policy, fortunately under one superintendent devoted to its objects. The tables presented relate to the parents of inmates; the inmates themselves; their moral, mental and physical development. From this report the following valuable contributions to knowledge relating to the subject under discussion are quoted:

	Per Cent.
Insanity of ancestors.....	11
Drunkenness in ancestors.....	37
Pauperized, or no accumulations.....	84
Associations positively bad, or not good....	97
Offenses against property.....	92
Good physical health.....	91
Quality of health—low, coarse and medium..	72
Home positively bad, or only fair.....	87
No home life.....	44
Illiterate, or simply read and write.....	61

*See report of Z. R. Brockway, Superintendent, 1897; also reports of Dr. W. Dox Wey, Physician.

	Per Cent.
Under twenty-five years of age.....	90
Mental qualities fair to good.....	92
Culture, none or slight	79
Moral susceptibility; positively none or some.	74
Moral sense, filial affection, sense of shame absolutely none, or possibly some.....	71

There remains a class of offenders who are not incorrigible, nor habitual criminals (although they may become such), but yielding to some sudden temptation or passion, they commit a crime against the person or property. Their instincts and life have not perhaps been bad or criminal. They may be called *occasional criminals*. Of those that may be placed in this class, it may be said of them that they possess a marked instability and inequality of character, which is aggravated and further unbalanced by the troubles, worries and temptations such as are incident to life. From this class in which the criminal habits are not as yet firmly fixed, reformations may be confidently expected.

The members of every prison community are made up of three classes, which for convenience of classification are called the *Incorrigible*; the *Habitual Criminal*; and the *Occasional Criminal*. They are committed to prison without reference to their mental, moral or physical status, but to penal servitude for a term fixed according to the offense. In the congregate prison they are brought together under one roof, into a more or less common association, and subject to a discipline whose severity is calculated to reach the small number of incorrigibles and constant offenders against the prison rules to which, however, universal conformity is expected. The discipline and rules have a tendency rather to tighten and become more restrictive, than to relax in severity. "Whether one member suffereth all the members suffer with it." The diseases and consequences that afflict a household, or a closely-packed community, that result from dirt, filth and a disregard of all sanitary laws are well known. What is true of the operation of the laws of the physical and material world, is also true in the realm of morals. The congregation and commingling of men of bad and criminal tenden-

cies, low morals, whether in or out of prison, is a nest of immoral infection—the culture-ground from which deterioration and progressive degeneration proceed with increasing intensity. Whatever the reformatories may plan and hope to accomplish with the young, they should never by any false system of classification or administration become “a preparatory school” for the prison, nor for any like reason should a convict have the opportunity to acquire within a prison any additions to his depraved nature.

The classification presented above may not be new nor generally accepted, but it is good enough to show that some arrangement is practicable for the better study of classes and individual cases. It is believed the time has arrived when a prison should stand for something more than the congregation of convicts in great receptacles, without any regard to the grade of their crime, condition, or individual needs. If a classification of criminals is to be intelligently carried out, it would be a necessary step first to prepare distinct plans adapted to each class. A good plan is the embodiment of an idea. It would become one of the instruments in the directing mind of the intelligent warden to do his best work. It is also believed that the office of warden, or governor, of a prison should be raised above the plane or grasp of the politician, where such ground for preferment is urged, and that the medical service of prisons should be elevated by the appointment of physicians skilled in their profession, and possessed of some knowledge of the mental and moral characteristics of criminal classes. In the study of criminology the two officers would supplement each other in their respective offices.

Assuming that the physician is qualified for the duties of his office by knowledge of human character; by ability to differentiate between sanity and insanity or idiocy; between reality and shamming or feigning; assuming that he possesses withal an inquiring, judicial, and investigating mind, then would he have an equipment to enter upon a field of investigation which needs explorers. He should have a position, the duties of which should be defined by law, but not so as to conflict with or possibly jeopardise the discipline of the warden or governor. The appeal is made that the medical

service of all prison establishments be placed on a higher plane, and that qualified physicians be placed in a position for the purpose of making scientific observations on every phase of all questions bearing on criminology. From the mass of facts so gathered by various observers, some principles might be established that would be helpful to the administration, and lead to intelligent legislation for the prevention of crime. On the commitment of a convict, an attempt should be made to individualize the person by a careful professional examination to determine the mental state, the physical condition, body weight, and by the usual measurements and methods to determine the existence of marks of degeneracy. While the government has no interest in the punishment of the insane, degeneracy alone with criminal tendencies, which does not extend to a degree to prevent a knowledge of right from wrong doing, with a remaining capacity that admits of the formation of orderly and industrious habits, should not exempt the convict from prison discipline. Society demands that these persons should be prevented from preying upon property, endangering human life, and propagating their kind, rather than that they should by any scientific theorizing or speculation be regarded as exempt from all of the consequences of crime. The careful examination of convicts at the time of admission would often arouse a suspicion of the existence of insanity, which further examination subsequently would dispel or confirm. It is undoubtedly true that many insane persons are tried and convicted whose insanity is subsequently discovered, and may be erroneously charged to the discipline of the prison, when, as a matter of fact, it had occurred before the commission of the crime, and may have even been the cause of it. Every convict would then become a case to be observed. Its history and professional observations should have a place in the prison records for the information of the warden or governing body, in order that the convict might be placed in his separate and proper class for further study. A record of matters wholly professional, as for instance, the determination of the state of the mental faculties and the physical health, would have much more scientific value if made by a physician who was competent, than if made by a clerk, warden, or governor.

In some prisons it is a rule that the physician attend such convicts only as are sent to the hospital by an officer. The prison physician may also be a non-resident officer who only answers calls in case of sickness. The scope of the medical service can with great advantage and protection of the prison authorities be enlarged so as to require the physician to make regular inspections of the sanitary condition of the establishment, and to keep case records of persons. It has been the experience of the writer to visit a number of prisons and jails to inquire into the mental condition of criminals charged with crimes, and he has never been able to obtain any medical history to aid in arriving at a conclusion. Although he has asked for such information, the responses has been wholly negative. The keeping of case records, which should also embrace notes of the moral and mental characteristics of criminals, would do much to promote the study of the psychology of crime, and would conduce to the individualization and judicious administration of the inmates of prisons. For the performance of this service who among the staff of officers of a prison is better prepared by study and training than the physician? and all the more if to his endowments be added the possession of a wise judgment, common sense, and the quality of loyalty and co-operation with the chief.

Allusion has been made to habit in its relation to crime, and the statistics quoted prove that the crime-habit is formed in early youth. The obvious course of treatment (if we can borrow the use of a medical term) is to break the habit of criminality by the substitution of stronger and higher motives to take its place. The foundation of a new life is to be laid in establishing habits of work, and it must be brought about by furnishing the opportunity of doing on compulsion something toward one's self-support. The problem of penology is to turn the criminal into paths of industry or occupation—into lines of living and acting that are normal in organized society. It is one of the obstacles to the formation of useful industry-habits in criminals that labor in prisons is so much restricted by the discussion of outside trades-union problems, in so far as they are supposed to be affected by prison labor. It is most unfortunate for the common weal, and deleterious to the mental and moral state of convicts

that so many live a life of compulsory idleness. It is to be hoped that on reconsideration wiser opinions will so far prevail that some industrial system will be restored wherever it has been abandoned. Not only is industry in general the potent aid to reformation, where it is to be looked for, but some variety of labor and trades should also be favored. As improvement of the morals of the convict, as well as of his physical condition is a chief object to be desired, so advantage might be sought from change of employment. It is not a principle that all diseases are to be cured by the same kind of medicine. So in the treatment of convicts it should be varied and persevered in until some tangible result is reached, even if an indeterminate sentence is necessary to accomplish the desired object. A monotonous labor that has no utility may be ordered as a form of temporary punishment, but next to absolute idleness a system of occupation that has no practical purpose cannot fail to exert a depressing and reactionary effect upon convicts. A system of prison discipline and management that has furnished nothing to improve the mental, moral, and physical condition of convicts during their terms of imprisonment, and has attempted nothing in this direction, falls short of the expectations of the community and is a failure.

It may be made the duty of the prison physician to make personal visits to all convicts at stated periods; to enter upon a medical record the body-weights; to note changes, if any, in the mental or physical condition, and inquire into their causes; to recommend in his regular reports changes in the kind of work or employment, if such be indicated by reason of the mental or physical condition of a convict, as would result to his benefit; to record the mental and physical condition of convicts at their discharge; to report all diseases and causes of death; to note the degree of sun-light in the cells and corridors, ventilation, temperature, dryness or dampness of cells, and the state of sanitary fixtures.

The warden or governor should in connection with the physician, or by aid of medical advice, prepare a dietary containing such articles as are calculated to form and sustain new tissues, which, when approved by the governing authority should be rigidly followed, published and posted in a place in

the prison office and store-keeper's room. The food when prepared should be subject to inspection. The dietary should conform to the locality of the prison, the nationalities, and to the conditions of convicts, whether of those engaged at hard labor, or of those in idleness. The warden or physician should have no authority to change the dietary except during periods of epidemics, and should order special diet for the sick from articles approved by the governing body. It is to be borne in mind that it is more economical to prevent disease (which may include crime and insanity) than to care for it after it has developed.

It is the better plan that the discipline and punishments in a prison be lodged in the discretion of the warden alone and applied by his agent. A prison physician should not be expected to interfere with disciplinary measures, but he should impart any knowledge he may possess of the perils that might arise from complications from existing bodily disease, the chance of mutilation of the body, as well as from the negative results of punishment inflicted upon irritable prisoners, and upon those who pose as martyrs or malingerers. In the latter classes absolute isolation may accomplish more than severe treatment, which may turn out to be but an experimental and questionable trial of the extent of strain the prison discipline will bear.

The central thought sought to be impressed in the paper presented is an appeal to raise the standard of medical service in prisons, and to collect a great array of facts that will facilitate the study of the mental and moral states of criminals in order to determine:—

1. On what principles the medical and sanitary service of prison establishments should be based;
2. How shall the regular medical supervision of their physical and mental health be ensured; and
3. How far shall the authority of the physician of the prison extend in the solution of questions concerning the nourishment of prisoners, their clothing, their work, the punishment inflicted upon them.

THE VALUE OF CYCLOPLEGIA IN OPTOMETRIC EXAMINATION.*

By C. M. CULVER, A. M., M. D.,

Albany, N. Y.

This paper is, at least in part, deduced from a review of the records of examination of one thousand eyes of my own patients, in private practice, in which artificial cycloplegia has been purposely produced for the sake of optometric examination. The case records of 5257 of my first private patients have been required, in order to have the desired data concerning one thousand eyes. Of the cases in which cycloplegia had been produced, for the purpose of optometric examination, 19.7 per cent. were unfit for use in the preparation of this paper, because of the incompleteness of my novitiate records, which incompleteness prevented the desired comparison of the seeming static refraction, before cycloplegia, and that found during cycloplegia. The number of eyes, the records of whose examination are trustworthy, one thousand, was chosen partly because of the facility of computing percentages from that number and partly because time for reviewing a greater number was not found. The usual effect of cycloplegia, showing itself as an increase in the discoverable amount of hyperopia or decrease in the strength of a concave lens necessary to enable the myopic eye to see well, has, in this paper been called a gain. In some cases, the opposite effects were obtained; that is, the hyperopia has appeared less or the myopia more, during cycloplegia, than before it was produced; such eyes have been accounted as furnishing a "loss." Of the one thousand eyes, 89.9 per cent. furnish gain, 4.5 per cent. furnish loss and 5.6 per cent. neither gain nor loss. These percentages may have been affected by the fact that the examiner is apt to use a deal of effort and patience to bring the manifest hyperopia as nearly as possible to the total, before having recourse to artificial cycloplegia. A gain of any amount of corrigible astigmatism has been estimated at half that amount, numerically, since a unit of gain, at right angles to the cylinder-axis, seemed to need to be averaged with the zero in the direction of the axis;

*Read before the Ophthalmologic Section of the American Medical Association, at Columbus, O., June 8, 1899.

which average seemed fairly stated as one-half the sum of the two. The rays entering an eye are proportionately more refracted as they are farther from the line of vision. This is partially or wholly explanatory of the 4.5 per cent. of cases in which cycloplegia resulted in what has here been called loss. It has been sought to eliminate the influence of existing fundus-inflammation, in the cases reviewed, since the effect of no cycloplegic drug can neutralize the effect of such inflammation. Acting upon the instruction of Doctor Edward Jackson and the corroborative testimony of Doctor Florence Mayo's investigations, it was assumed by me, years ago, that the installation of a $2\frac{1}{2}$ per cent. solution of the hydrobromat of homatropin, in an eye, six times, at intervals of five minutes, will produce cycloplegia within an hour from the time of the first instillation. Such cycloplegia has not always resulted. In a few cases, the instillation of the cycloplegic solution needed to be continued. In fourteen cases, of the thousand eyes, under consideration, the eye, whose cycloplegia had been so sought, could read Jaeger's No. 2, at twenty-four centimeters, an hour after the time of the first instillation. In some of such cases the incompleteness of the cycloplegia may, perhaps, be explained by the carelessness of the person who made the instillations, although the attendants who have been entrusted with the use of the cycloplegic have usually been carefully taught, by the examiner or some experienced attendant, in the method of its use.

The total gain in the 1000 eyes was 640.732 Dioptries.

"	loss	"	"	"	13.875	"
					626.857	"

Hence the average gain was 0.6268 Dioptry.

There were 799 of the eyes which furnished gain.

"	44	"	"	"	loss.
"	157	"	"	"	neither gain nor loss.

299 eyes furnished a gain of 0.5 or less.

218	"	"	more than 0.5, but less than 1.0 D.
96	"	"	1.0 " 1.5 D.
45	"	"	1.5 " 2.0 D.
17	"	"	2.0 " 2.5 D.
14	"	"	2.5 " 3.0 D.
7	"	"	3.0 " 3.5 D.
2	"	"	3.5 " 4.0 D.

None of the eyes furnished a gain between 4.0 and 5.0 D.

One eye furnished a gain of 5.5 D; it was the *right* eye of a girl with slight convergent strabismus, whose *left* eye furnished a gain of 3.5 D. She was eleven years old, when examined, in 1894; the use of Dr. Casey A. Wood's ophthalmic discs, No. 342, one hour, raised the hyperopia of the right eye from 2.5 to 8.0 D., that of the left eye from 2.5 to 6.0; each eye was astigmatic, the right by 0.75, the left by 2.25 D; this amount of astigmatism was common to each eye before and during the cycloplegia. It seems worthy of note that, in each of these eyes, the obtainable acuteness of vision was greater during than before cycloplegia; that of the right was increased from less than 6-9 to 6-6 of Snellen's standard, and that of the left from less than 6-21 to 6-12, of Snellen's standard, by the cycloplegia, or, at least, during it.

40 eyes furnished *loss* of 0.5 D., or less.

2 " " more than 0.5 but less than 1.0 D.

2 " " " 1.0 " 1.5 D.

None of the eyes furnished a loss greater than 1.5 D.

None of the eyes were those of persons less than five years old.

No. Eyes.	Age.	Gain (average.)
31	5-10	1.05 D.
92	10-15	0.75 D.
225	15-20	0.56 D.
228	20-25	1.299 D.
160	25-30	0.58 D.
128	30-35	0.664 D.
101	35-40	1.05 D.
25	40-45	0.54 D.
7	45-50	0.446 D.
3	50-55	0.125 D.

In a few cases, I have found more hyperopia evident some time after cycloplegia than before or during it. In case 5231, a woman twenty-three years old had 100 per cent. of visual acuity, according to Jackson's standard, with each eye, without a glass or with convex, spheric 0.75 D., the ciliary muscle being normally contractile, on the 10th September, 1895. On October 2d, same year, 2 ½ per cent. solution hydrobromat of homatropin was instilled in each eye, as above de-

scribed. Seventy-three minutes after the first instillation, each eye had the same visual acuity (100 per cent. Jackson) with each convex spheric 1.25. On May 26th, 1899, each eye had the same visual acuity as on the former dates, just given, with each convex spheric 1.75. How this is to be explained, since no disease was found in either eye at any of the examinations, is a question I ask, not answer. Another similar experience is somewhere recorded in my case-records, but the time to seek its history has not been found.

Experience with the thousand eyes in question has helped lead to the conclusions:

1. A solution of 2 ½ per cent. of homatropin hydrobromat, instilled six times, at intervals of five minutes, provides trustworthy cycloplegia in the average, healthy human eye, in from one to three hours from the time of the first instillation; usually in an hour or ninety minutes.

2. As a rule, the protracted use of a one per cent. solution of the sulphat of atropin is no more effective, as a cycloplegic, than is the 1:40 solution of the alkaloid above mentioned.

3. In ten per cent. of the cases consulting an ophthalmic surgeon, it is desirable to produce artificial cycloplegia. In such cases, the production of cycloplegia is inevitable, if the examiner will provide refractive correctives that shall afford the patients the *best* service.

For the ANNALS.

AMBROISE PARÉ.*

"Let the surgeon be well educated, skilful, ready, and courteous. Let him be bold in those things that are safe, fearful in those that are dangerous; avoiding all evil methods and practices. Let him be tender with the sick, honorable to men of his profession, wise in his predictions; chaste, sober, pitiful, merciful; not covetous or extortionate; but rather let him take his wages in moderation, according to his work, and the wealth of his patient, and the issue of the disease, and his own worth."

The biographer has chosen to describe his hero by this precept of Guy de Chauliac, "whose writings were expounded

* *Ambroise Paré and His Times*, 1510-1590. By STEPHEN PAGET. Illustrated. G. P. Putnam's Sons, New York and London; The Knickerbocker Press, 1897.

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September, 1899.



AMBROISE PARÉ, AT 75.

FROM A PRINT BY HORBECK.

FROM AN ENGRAVING IN THE PRINT-ROOM, BRITISH MUSEUM.

From

Ambroise Paré and His Times.

G. P. Putnam's Sons.



to Paré during his apprenticeship, and who was a man after Paré's own heart." Paré was sixteen years of age when Paracelsus began lecturing. It is not assumed that Paracelsus directly influenced him, for his nature was essentially milder than that of the "great iconoclast." The fact may be cited, however, as showing that the age of the spirit of free thought in medicine had come.

That the "Founder of Modern Surgery" should be recognized in a series of books upon French History, which includes biographies of Jeanne d'Arc, Louis XIV, Napoleon, Bertrand de Guesclin and Le Comte de Cominges, is a flattering acknowledgment of the supremacy of the art. It is particularly so in the case of Ambroise Paré, for it was to his surgical skill alone, and not to any political genius or court intrigues that he came to play such a great part in the drama of the sixteenth century. Surgeon to four kings of France, Henri II., and his three sons, Francis II., Charles IX., and Henri III., and also to the King of Navarre, he marshals before us in his writings sketches of the characters of that regenerating period, not in the distant perspective of history, but in the midst of the emotions and passions of daily life.

Paré was born in 1510, and secured in his boyhood only a limited education, even for that time. It is not known with whom and where he served his apprenticeship as a barber-surgeon, but he is identified in Paris in 1533, and served as house officer at the Hôtel Dieu for three years. His service was probably an active one, as in addition to his routine duties he saw the whole in-patient and out-patient practice with the plague, and seems to have worked well, as his departure was followed by a regular riot of the students. Leaving the hospital he gained a foot-hold in Paris, and practiced there when he was not off to the wars. The descriptions of his practice in the wars, given in his *Journeys in Diverse Places*, show his vigor and resourcefulness, and his contempt for any tradition or method not appealing to his common sense. The *Journeys* were published in 1585, in answer to an attack made upon Paré in 1580 by Gourmelen, Dean of the Faculty of Medicine, in which he asserted that Paré's use of the ligature after an amputation was inferior to the long established use of the cautery. Paré's rejoinder

does away with the supposition that he invented the ligature, his argument being: (1) It is nothing new to stop a vessel, bleeding in a wound, with the ligature. (2) I am the first surgeon who has ever used the ligature to stop the bleeding of wounds made by amputations. (3) I have had good results by this method. (4) My discovery was made not by sitting in a chair and thinking, but by years of hard practical work in Paris and with the army.

In the last claim is indicated the source of Paré's greatness, and in his contempt for tradition (which was the basis of his accuser's attack), is to be found the beginnings of the great science of which he was the father. The *Journeys* abound in clinical experiences, in which his genius for practical observation is revealed. He accidentally, and from necessity, got a hint upon the antiseptic treatment of wounds, which he describes as follows:

"I had read in John de Vigo, first book, *Of Wounds in General*, eighth chapter, that wounds made by firearms partake of venenosity by reason of the powder; and for their cure he bids you cauterise them with oil of elders scalding hot, mixed with a little treacle. At last my oil ran short, and I was forced instead thereof to apply a digestive made of the yolks of eggs, oil of roses, and turpentine. In the night I could not sleep in quiet, fearing some default in not cauterising, that I should find the wounded to whom I had not used the said oil dead from the poison of their wounds; which made me rise very early to visit them, where beyond my expectation I found that those to whom I had applied my digestive medicament had but little pain, and their wounds without inflammation or swelling, having rested fairly well that night; the others, to whom the boiling oil was used, I found feverish, with great pain and swelling about the edges of their wounds. Then I resolved never more to burn thus cruelly poor men with gunshot wounds."

Throughout his notes Paré's devotion to his profession, and especially to his patients' welfare, and his firmness in his opinions are shown.

"One of the servants of the captain-ensign of the company of M. de Rohan went with others to enter a church where the peasants were retreated, thinking to get victuals by love or by

force; but he got the worst of it, as they all did, and came back with seven sword-wounds on the head, the least of which penetrated to the inner table of the skull; and he had four other wounds upon the arms, and one on the right shoulder, which cut more than one half of the blade bone. He was brought back to his master's lodging, who seeing him so mutilated and not hoping he could be cured, made him a grave, and would have cast him therein, saying that else the peasants would massacre and kill him. I in pity told him the man might still be cured if he were well dressed. Diverse gentlemen of the company prayed he would take him along with the baggage, since I was willing to dress him; to which he agreed, and after I had got the man ready he was put in a cart, on a bed well covered and well arranged, drawn by a horse. I did him the office of physician, apothecary, surgeon and cook. I dressed him to the end of his case, and God healed him; insomuch that all the three companies marvelled at this cure."

In his civil life in Paris Paré was no less sincere and uncompromising, and not always free from the bigotry and quackery and superstition of the day. Nor was he free from professional quarrels with the medical institutions, as would be expected from his progressive spirit, and free thinking.

Save art and politics, the works of Paré contain every possible subject: anatomy and physiology, medicine, surgery, obstetrics, state medicine, pathology, phàrmacy, natural history, demonology, and much else. In the Dedication to the King of the edition of 1575 of the *Opera Omnia*, he writes a prophecy which held for two centuries and a half, until ended by the work of Lister:

"God is my witness, and men are not ignorant of it, that I have labored more than forty years to throw light on the art of surgery and bring it to perfection. And in this labor I have striven so hard to attain my end, that the ancients have nought wherein to excel us, save the discovery of first principles; and posterity will not be able to surpass us (be it said without malice or offence) save by some additions, such as are easily made to things already discovered."

His great skill, his service in the field and in court threw him in almost daily contact with the nobility, and with the

great generals and statesmen of France and of other countries. His narrative abounds in references to Orange, Philip, Guise, Navarre, Elizabeth, Alva, Mary Stuart, with many of whom he was on terms of personal intimacy. In the epigrams and satirical verses arising from the Catholic and Huguenot differences, his name is not once mentioned, either for good or for evil.

Thus it was to him that the King in the first moment of regret which followed the massacre of St. Bartholomew, turned, and Paré, though suspected of heresy, was protected by his skill, and even favored. The anecdote is quoted from Sully: Of all those around the King, not one had so much of his confidence as Ambroise Paré. This man, who was only his surgeon, had become so familiar with him on the day of the massacre, when the King told him that everybody must now turn Catholic, Paré coolly answered him, "By the light of God, Sire, I think you remember your promise never to command these four things of me: To enter again into my mother's womb, to look after myself in battle, to leave your service, and to go to Mass." The King took him aside, and disclosed the misery he felt overwhelming him. "Ambroise," he said, "I do not know what has come over me these last two or three days, but I find myself, mind and body, as much shaken as if I had the fever. It seems to me at every moment, sleeping or waking, these massacred bodies keep showing me their frightful, blood-stained faces. I can only hope that among them are none that were witless, none that were innocent." And so glimpses are given of the more private thoughts of Catherine de Medicis. With Catherine of Medicis he must have conversed a great many times. He watched by the bedside of dying Coligny, attending the King Charles IX. in his last illness, and in his campaigns rendered surgical aid to all of the great French officers and nobility, and even, when captured by the Spaniards in *The Journey to Hesdin*, rendered like service to his country's enemies, and refused a bribe to enter their service.

His sympathetic nature was well shown in his speech to the Archbishop of Lyon, four months before he died, in his eightieth year, for which we are indebted to the memoirs of Pierre de L'Estoile:

"I remember about eight or ten days at most before the siege was raised, Monseigneur the Archbishop, going over the end of the Pont Saint Michel, when he found his way blocked by a crowd of those who were dying of hunger, they cried out to him begging for bread or else for death; he not knowing what to say to them, Master Ambroise Paré meets him, and says to him in a loud voice, 'Monseigneur, this poor people that you see here round you are dying of the cruel pangs of famine, and they ask pity of you. For God's sake, Monsieur, have pity on them, if you want God to have pity on you; think a little of the high place to which God has called you, and how the cry of these poor men and women goes up to heaven, and is a warning sent you by God, to remind you of the duties of your office, of which you have to answer to Him. Therefore, by that office and by the power that we all know you have, bring about peace for us, and give us a way of living, for the poor can no longer help themselves. Do you not see that all Paris is dying, because of the villains who wish to prevent peace, which is the special work of God? Set your whole strength against them, Monsieur; take in hand the cause of this poor afflicted people, and God will bless you and repay you.' Monseigneur the Archbishop said nothing, or next to nothing; only he was patient to hear him out and not interrupt him, which was not his usual way; and he said afterward the good man had fairly astonished him; and again, this was not the sort of politics he was wont to hear talked; and Master Paré had waked him up, and made him think of many things."

FIRST REPORT OF THE DIRECTOR OF THE BENDER
HYGIENIC LABORATORY TO
THE TRUSTEES.

BENDER HYGIENIC LABORATORY,

ALBANY, N. Y., *June 1, 1899.*

To the Trustees of the Bender Hygienic Laboratory.

GENTLEMEN:—I herewith submit my report on the work done by the laboratory from the time of its opening in Octo-

ber, 1896, to June 1, 1899, a period of a little over two and one-half years.

Part of the routine work was begun in the laboratory in the beginning of October, 1896, but the building was not formally opened until October 17, 1896. The work of teaching could not begin until about the middle of October, 1896 as the necessary apparatus did not arrive until this time. The work done within the time mentioned in the report has consisted in the organization of the laboratory, teaching, pathological and bacteriological work, and work in certain departments of hygiene.

As the work of the laboratory consists in large part of teaching it is necessary to have some system by means of which the pathological and bacteriological material shall become easily accessible for teaching purposes. This has been accomplished by a numerical system arranged on a decimal plan, and modeled on the "Dewey" method of classification. It is unnecessary to go into the details of this system; suffice it to say that the different organs and tissues of the body are divided into systems which are again subdivided. A specimen coming from a given organ is given its appropriate number, which is also given to the microscopic section from that specimen, both specimens and microscopic sections being filed away in regular numerical order.

The ordinary matters of organization, i. e., the matters pertaining to getting the laboratory into running order and finding places for the apparatus, etc., have progressed favorably with, as would be expected, a few minor difficulties easily overcome. The uses for which the rooms of the laboratory were originally designed have in the main been adhered to, though in one instance, that of the museum, the room set apart for that purpose has had to be utilized as a living room for the janitor, as no other appropriate place was vacant.

The teaching has been carried on throughout the college term from the end of September to the middle of April. The histological work under Dr. Hailes has occupied two mornings a week from the beginning of the term to the first of February; from the first of February to the end of the term it has been carried on by Dr. Lartigau and the director. The clinical microscopy under Dr. Lartigau has occupied two

afternoons a week, and the pathology and bacteriology under the director three mornings a week. The teaching has consisted entirely of practical courses in the above named subjects, such courses usually being preceded by short explanatory lectures sufficiently detailed to give the student an idea of the work which was to be carried on after them.

The pathological work has consisted of autopsies and of the examination of specimens sent by the members of the surgical staffs of the different city hospitals. The number of autopsies made from the opening of the laboratory until June 1, 1899, has been 204. Of these 134 have been held in the various public institutions, and 70 have been private autopsies. The public institutions drawn upon for this material have been mainly the Albany Hospital, St. Peter's Hospital and the Child's Hospital. Autopsies have also been done at the Albany Orphan Asylum, Home for Incurables, St. Vincent's Orphan Asylum, the Albany County Penitentiary, and the Rensselaer County Almshouse in Troy. In all these cases an attempt has been made to keep accurate records both of the naked eye findings and of the microscopic appearances. A few autopsies have been made at the laboratory for the benefit of the students, but it is usually difficult to secure autopsy material at the institution on account of the distance from any of the public buildings from which the autopsy supply is obtained.

The single specimens examined have usually been tumors or pathological conditions removed by the surgeons. The majority of these have been sent from the Albany Hospital, from the services of Drs. Vander Veer and MacDonald; a few have also been sent by the other members of the surgical staff of the hospital, Drs. Hailes and Morrow; a few have come from private sources. The number of specimens which have been received within the time stated has been 428, of which number 372 were received from the surgeons connected with the hospitals and 56 from private sources. As was the case with the autopsies so, also, with single specimens, accurate records both of the naked eye and microscopic appearances have been kept.

A fair number of specimens of various kinds have been sent to the laboratory by physicians in the city and the sur-

rounding country for microscopical examination. These specimens have consisted of samples of urine or sputum, of portions of tumors, of scrapings from the uterine cavity removed for diagnosis, of specimens of blood and of miscellaneous specimens, fæces, etc. Since the opening of the laboratory 235 such specimens have been received, of which number 94 were specimens of urine; 62 of sputum; 15 of scrapings; 23 of tumors; 20 of blood and 21 miscellaneous.

The bacteriological work has consisted of routine bacteriological work in connection with autopsies (cultures from the blood and various organs have been taken in each autopsy unless there has been some contraindication) and of the bacteriological examination of swabbings from suspected diphtheria cases. The greater portion of this latter work has been done for the Albany City Board of Health, the number of cultures examined varying in different years according to the prevalence of the disease. The table appended to the report gives the number of cases per month from January 1st, 1897, to June 30th, 1899. In connection with this work it may be said that there have also been examined at the laboratory for the city Board of Health, specimens of sputum suspected to contain tubercle bacilli, though the number of these latter submitted has been small, averaging about 25 specimens per year. Besides making the diphtheria examinations for the city Board of Health, work of this kind has been done for several outlying cities, the cities of Schenectady and Mechanicville sending all their diphtheria work to the laboratory, and other cities sending tubes occasionally.

Within the last two years a considerable amount of work along the lines of hygiene in the form of examination of drinking waters has been done by the laboratory. Most of this work has been done for the city water board, but a fair amount has been done for the state and city Boards of Health. During the last summer constant examinations were made of the water in the main and back channels of the Hudson river near the intake of the new filter plant for the purpose of determining which channel should be employed for the purpose of procuring water. For the city Board of Health during the last two years a number of wells in the city have been examined, and several of these have been condemned as the

result of these examinations. The bacteriological and chemical examinations to be made at the new city filter plant will be under the direct control of the laboratory.

From time to time, during the course of the laboratory work, cases or groups of cases which were interesting, either from a pathological or a bacteriological point of view, have appeared. A number of these cases or groups of cases have been reported in various medical journals, either by the director or his assistant. During the last two and one-half years papers have been published upon dysentery, certain phases of typhoid fever and of tuberculosis, and on various other interesting subjects which have been encountered during the routine work.

Finally with regard to the building itself and the equipment pertaining thereto, it may be said that both have stood the necessary wear and tear very well. A few minor repairs have had to be made from time to time to the building, generally as the result of slight injuries to the heating apparatus, but no serious trouble has been encountered. The full set of apparatus which was furnished by the college at the opening of the laboratory has, some of it, necessarily undergone the deterioration which results from constant use. A few pieces of apparatus, particularly some of the more delicate apparatus, which has been in use for three terms by the students will have to be replaced. It need only be said that these changes are the natural result of wear, and that on the whole the building and the apparatus have been as satisfactory as could be expected.

The following table shows the diphtheria work done for each month, commencing January 1, 1897, and ending June 30, 1899 :

	No. of cases examined.	Diph- theria.	Not Diph- theria.		No. of cases examined.	Diph- theria.	Not Diph- theria.
1897				1897			
January	23	18	5	August	5	4	1
February	19	10	9	September	7	6	1
March	19	11	8	October	27	17	10
April	82	38	44	November	33	20	13
May	72	21	51	December	31	17	14
June	26	12	14				
July	20	6	14	Total	364	180	184

	No. of cases examined.	Diph- theria.	Not Diph- theria.		No. of cases examined.	Diph- theria.	Not Diph- theria.
1898				1899			
January	37	16	21	January	21	12	9
February	42	10	32	February	18	7	11
March	23	14	9	March	24	5	19
April	26	8	18	April	19	9	10
May	14	3	11	May	13	2	11
June	6	1	5	June	8	1	7
July	11	2	9				
August	8	0	8	Total	103	36	67
September	14	4	10				
October	28	12	16				
November	34	15	19				
December	27	8	19				
Total	270	93	177				

The following table shows the chief anatomical diagnosis in the autopsies performed during the period covered by this report:

Adeno-carcinoma of stomach	1	Endocarditis, acute	3
Adrenal gland, tuberculosis of	2	Endocarditis, chronic	8
Anæmia, pernicious	1	Endocarditis, subacute	1
Aneurysm of basilar artery	1	Epithelioma of stomach	1
Aneurysm of thoracic aorta	1		
Angina, diphtheritic	2	Glioma of frontal lobes	1
Angioma of œsophagus	1		
Anorexia nervosa	1	Heart muscle, gumma of	1
Aorta, rupture of	2	Hemorrhage, cerebral	2
Appendicitis, gangrenous	1	Hernia, strangulated inguinal	1
Arterio-sclerosis	9		
		Intestinal mucosa, atrophy of	1
Bronchitis, acute	2		
Broncho-pneumonia	6	Larynx, fracture of	1
		Leukæmia, lymphatic	1
Carcinoma		Leukæmia, spleno-myelogenous	1
Primary, of gall bladder	1	Lungs, congestion of	1
Primary, of mammary gland	2	Lymph gland tuberculosis	1
Primary, of pancreas	2		
Primary, of skin of groin	1	Meningitis, acute	2
Carcinomatosis, general	2	Meningitis, tubercular	2
Cirrhosis, atrophic	2	Multilocular ovarian cyst	1
Cirrhosis, hypertrophic with icterus	2		
Coronary artery, thrombosis	3	Nephritis, acute	1
		Nephritis, chronic diffuse	2
Dysentery, chronic	3	Nephritis, chronic interstitial	17
		Nephritis, chronic parenchymatous	7
Empyema, chronic	1	Nephro-lithiasis	1

Otitis media, with sinus thrombosis	2	Septicæmia (aureus)	3
		Softening, cerebral	2
Paralysis agitans	1	Status epilepticus	1
Papillo-cystoma of ovary	1		
Peritonitis, acute	3	Tetanus	1
Peritonitis, chronic	1	Thymus gland, hypertrophied	1
Phlegmonous inflammation of thigh	1	Tuberculosis, generalized	9
Pleuritis, acute	1	Typhoid fever	13
Pneumonia, acute lobar	13		
Pulmonary tuberculosis	14	Ulcer, perforating round, of stomach	1
		Urinary infection, ascending	6
Sarcoma			
Localized	4	Vertebral column, fracture of	2
Generalized round cell	1		
Generalized melanotic	1	Wound, gunshot of abdomen	1

The following table shows the character of the specimens from single organs examined during the time covered by this report:

NERVOUS SYSTEM.		Endometrium, normal,	2
Cerebellum, tuberculosis of	1	Endometrial glands, hyperplasia of	3
Cerebrum, laceration of	1	Epididymis, tuberculosis of	3
Cerebral sarcoma	1	Fallopian tubes, normal	3
Neuritis of digital nerves	1	Fallopian tubes, tuberculosis of	4
Pituitary body, hypertrophy of	1	Hemato-salpinx, double	1
Poliomyelitis anterior	1	Kidney, tuberculosis of	2
		Nephritis, ascending	4
		Nephritis, chronic parenchymatous	1
VASCULAR SYSTEM.		Nephro-lithiasis	2
Atheroma of popliteal artery	1	Ovaries, fibrosis of	2
		Periorchitis, chronic	2
ALIMENTARY SYSTEM.		Pregnancy, extra-uterine	2
Anal fissure	2	Prostate, hypertrophied	2
Anal fistula	1	Salpingitis, acute	6
Appendicitis, acute	19	Salpingitis, chronic	19
Appendicitis, chronic	20	Salpingitis, subacute	2
Cæcum, tuberculosis of	1	Salpingo-oophoritis, chronic	1
Pancreatitis, chronic interstitial	1	Testicle, atrophy of	1
Peritonitis, tuberculous	1	Testicle, tuberculosis of	5
Proctitis, chronic	1		
Ulcer of rectum	1		
Ulcer, round of stomach	1		
GENITO-URINARY SYSTEM.		HEMATOPOIETIC SYSTEM AND UNCLASSIFIED GLANDS.	
Cervix, lacerated	2	Lymph gland hyperplasia	2
Cervix, normal	1	Lymph gland tuberculosis	15
Decidual tissue	1	Mammary gland tuberculosis	2
Endometritis, acute	4	Thyroid gland tuberculosis	1

OSSEOUS AND MUSCULAR SYSTEMS.		Caruncle, urethral	1
Arthritis, chronic	2	Chondroma	
Femur, tuberculosis of	2	of Humerus	1
Knee joint, tuberculosis of	4	of Metatarsal Bone	1
Maxilla, necrosis of	1	of Nose	1
Metatarsal bone, necrosis of	1	Condyloma of anus	1
Osteitis, rarifying	2	Cysts	
Ribs, necrosis of, post typhoid	2	Dermoid of Ovary	1
Synovitis, chronic proliferative	1	of Labium majus	1
Tarsus, tuberculosis of	2	of Ovary, multilocular	15
Tibia, tuberculosis of	1	of Ovary, papillomatous	4
		of Ovary, simple	6
		of Testicle, multiple	1
SPECIAL SENSES AND MISCELLANEOUS.		Tubo-ovarian	1
Foot, gangrene of		of Vulvo-vaginal gland	1
Glossitis, interstitial	1	Endothelioma of Forearm	1
Hemorrhage into tongue	1	Epithelioma	
Hemorrhage, intra-ocular	1	of Cervix Uteri	8
Hypertrophy, congenital, of toe,	1	of Face	8
Pituitary gland hypertrophy	1	of Glans Penis	3
Spina bifida sac	1	of Jaw	3
Skin, ulceration of	1	of Lymph Glands	4
Skin, tuberculosis of	2	of Skin	3
Subcutaneous tissue, inflammation of	6	of Tongue	1
		Fibroma	
		of Arm	1
		of Breast	13
Adenoma		of Finger	1
of Mammary Gland	1	of Gums	1
of Rectum	1	of Ovary	2
of Thyroid Gland	10	of Skin	1
Adeno-Carcinoma		of Toe	1
of Epididymis	1	Hematoma of Penis	1
of Neck	1	Hydatid Mole	1
of Ovary	1	Keloid	
of Rectum	2	of Arm	2
of Thyroid	1	of Ear	1
of Uterus	3	Myoma	
Adeno-Myoma		Subperitoneal	1
of Round Ligament	1	of Uterus	31
of Uterus	1	Myxoma of Breast	1
Carcinoma		Sarcoma	
of Breast	39	of Bladder	1
of Face	4	of Bone	2
of Kidney	2	of Brain	2
of Lymph Glands	6	of Breast	1
of Ovary	2	of Epididymis	2
of Ovarian Cyst	1	of Eye	1
of Skin	2		

Sarcoma		Sarcoma	
of Extremities	8	of Palate	1
of Face	3	of Skin	2
of Jaw	3	of Subcutaneous Tissue	5
of Kidney	1	of Tonsil	1
of Lymph Glands	3	of Uterus	1
of Neck	3	Teratoma of sacral region	1
of Ovary	2		

Respectfully submitted,

GEORGE BLUMER, *Director.*

Correspondence

THE GERMAN GYNÆCOLOGICAL SOCIETY.

The eighth congress of the German Gynæcological Society, which was held in Berlin from the 24th till the 27th of May was both interesting and instructive. The meeting was opened by the President, Prof. Dr. Olshausen, who, after welcoming the delegates to Berlin, delivered an address entitled: "Strange Events and Destinies." The age of the physician determines the tendency of the individual and changes his manner of observing events. Precaution, experience, criticism should be used in accepting new ideas. Conservatism in this respect is not to be antiquated. As examples are cited the intra-uterine application of 50 per cent. chloride of zinc paste, which is to-day almost forgotten and the Cæsarean section according to Porro's method, which now, thanks to the improved technique, is seen to be hardly any more dangerous than a normal labor.

The pelvic position which brought the field of operation into view and lessen the shock, marked a great advance. The history of myomata, ending in the adoption of the intra-peritoneal method, which was the method in use at first and then being superseded for awhile by the extra-peritoneal only to come into favor again is another example of the point under discussion. Also in the extirpation of the cancerous uterus it is possible that we will again return to the abdominal route in order to make use of radical methods. An examina-

tion of the remaining tissue is necessary in order to prove that by the removal of the glands a reappearance of the growth is really avoided. Myomata show only through their subsequent manifestations a reappearance. New methods may be tried in some cases before one enlarges farther the indications for operation. He who takes time to learn, acquires the best technique and will have under the same circumstances a smaller percentage of deaths than he who almost always operates. Concerning the retro-flexion operations, especially the vaginal ones and more particularly the Alexander operation, some had been too skeptical, others too enthusiastic. In the treatment by pessaries it is proved that the Thomas ring often works a cure. New operative procedures as well as new methods of internal healing are to be tried. The strife between conservative and progressive tendencies increases our knowledge of the subject. Old methods should not be supplanted by bad methods, and also the new methods should not terrorize the old. Mistakes are made upon both sides. The narrow path of truth lies in the middle. Also for new operations it is worth while first to weigh then to risk.

Dr. Zweifel, Leipsig: *The Medical as well as the Symptomatic Treatment of Myoma.* He has observed no especial benefit by the use of ergotin and hydrastis. Strychnine has been found of use in the treatment of hæmorrhage. Intra-uterine injections of chloride of iron are scarcely less dangerous than an operation. Curetting gives no bad results. Electrolysis helps for some months in cases of hæmorrhage. For pain hydrastis is especially good. For prevention of the growth of the tumor there is no non-operative treatment. The operation whenever possible should be performed through the vagina on account of the disadvantages of an abdominal wound, although Zweifel had in only 4 per cent. of his cases after laparotomy, a general hernia and after myomectomies had never observed a single case of trouble.

Dr. Graz argued the point in how far can a more conservative treatment of the myoma be employed exact. Statistics of the non-operated cases is necessary. The mere knowledge of the presence of a myomatous growth is not sufficient ground for operating. A great many cases require no treat-

ment for they make no trouble and cause no injury to the organ. It is better to wait for the menopause when in a majority of cases the tumor ceases to grow.

Dr. Werth: *Resulting Symptoms after an Abdominal Myomectomy with Non-removal of the Ovaries.* Werth disputed the assertion made by Zweifel, concerning the principle of the Abel examination, that a mutual independence upon each other existed between the ovary and the body of the uterus, in their topical relations and therefore preservation of the ovaries after a laparoto-myomectomy was only possible if when the uterus was removed a part of the body of the uterus was left behind. In the experiments of the conservative removal of the ovaries, it must be borne in mind, that the operative interference, through the breaking up of the uterine anastomoses, places the nourishment of the non-removed ovaries in question.

Dr. Sellreim presented a paper on *Castration and its Relation to the Growth of Bone.* He presented a report of studies upon the growth of bones of old people, both male and female, who had been castrated in youth. He examined parts of skeletons of animals who for economical reasons had been castrated and supplmented to this other experiments. In the long bones of castrated male mammals (boars, oxen, geldings, etc.); there arose an abnormally long retention of the cartilaginous epiphyseal plates and with the cartilage cells still growing and symmetrically placed. Therefore the well recognized lengthening of the extremities in castrated male animals is made plain. The influence of castration upon the growth of the bones in young women seems in a similar manner. The experiments were tried upon large female dogs of the same litter. In the skeletons of the sluts occurs a considerable increase in height and length. All the bones of the extremities are longer and more slender; the skull is longer and broader but lower. In the pelvis the relations of the diameters at the entrance and outlet are altered.

Dr. Bruenig presented a paper on *Lipoma of the Uterus* and showed a series of microscopical slides. In the specimens, it can be seen that the fat cells have taken the place of the muscle cells so that in many places the muscle tissue is entirely replaced by fat cells. One can notice how first

vacuoles of fat appear in the muscle cell which by degrees becomes larger and so finally a large fat cell is found, wherein the nucleus of the muscle appears pressed down to the lower wall.

Dr. Werth showed a microscopical specimen of a very fresh tubal pregnancy which could not have been more than two weeks old.

The rest of the meeting was mostly occupied with questions of an obstetrical nature and closed at noon, May 27th, to meet again next year in Frankfurt.

EDGAR A. VANDER VEER.

WÜRZBURG LETTER.

WÜRZBURG, BAVARIA, *July* 30, 1899.

Würzburg is one of the few old appearing cities in Europe. Although not so picturesque as Nuremberg, it is a more characteristic type of the old German city. The university and hospital are correspondingly old, the university dating from 1402 and the famous Julius Hospital from 1580. Three years ago the university took possession of its large and handsome building constructed of granite in the late renaissance style and over the centre of which is a piece of statuary "Truth Conquering the World." In the central hall is a tablet commemorating the students who died in the Franco-German war, more than half of whom were medical students. In contradistinction the hospital is practically the same as when built more than a hundred years ago. It is quadrangular in form, three stories high, has a garden within and a larger one back. In front there is a corridor and off of this are the different wards which contain usually eight to ten beds. Although not nearly so large, its general appearance resembles very closely that of the general hospital at Vienna. The pathological laboratory was arranged in 1850 by Virchow, who here worked out his famous cellular pathology. The buildings for anatomy, physiology, pathological anatomy and chemistry are large and handsome and very close to the hos-

pital. In the last mentioned Roentgen made his discovery. Roentgen, noted for his modesty and diffidence, has been recently appointed to a professorship at Munich and goes there in the fall.

In medicine Leube is the professor and his fame is such that patients come from all parts of the world to visit him. Very recently the Crown Prince of Germany was under his care. He was the first to systematically use the stomach tube for diagnostic purposes and his book on differential diagnosis had passed through many editions. He has been exceedingly gracious and often will go into details about the most interesting cases. His treatment of appendicitis is simple and most satisfactory in its results. He places an ice bag over the right inguinal region, gives opium suppositories and for nourishment allows only a solution of peptone and sugar water. These are both absorbed by the stomach, whereas plain water passes into the intestines. The opium is given in rectal suppositories so as not to disturb the stomach and everything is done to keep the intestines absolutely at rest. The bowels are not moved for a week and then the rectum is gently washed out with the normal salt solution. As a result of this conservative treatment Leube for fifteen years did not lose a patient with appendicitis, a most remarkable statement which he himself made to me.

In the wards for tubercular cases each patient has two sputum cups, one for the expectoration and the other containing cotton, which the patient is instructed to hold before his mouth every time he coughs in order to catch the bacilli contained in the invisible vapor.

When one learns that Berlin has taken from Würzburg its Virchow, its Gerhardt and its von Bergmann, nothing more need be said about the scientific standing of its medical faculty. It is pleasing to find that the city of Würzburg is properly appreciative of the lustre given to it by its medical faculty, by naming one of the handsomest streets Schönbornstrasse after the present professor of surgery, Schönborn, and another Köllikerstrasse, after the famous anatomist, Kölliker, who though old, is still an active member of the faculty.

ANDREW MACFARLANE.

Editorial

Saline Infusions in Pneumonia.

Under the title "Infusion of Salt Solution Combined with a Special Method for the Administration of Oxygen Inhalation as a Treatment in Pneumonia," Dr. Clement A. Penrose reports in the *John Hopkins Hospital Bulletin* for July, promising results from the method described. The infusions of salt solution were given in the usual fashion employed in the hospital, i. e., the salt solution at a little above body temperature is poured into a graduated bottle, from the bottom of which runs a long rubber tube. The needles, which are introduced under the breast, or into the subcutaneous tissues of the thighs, etc., are connected with this tube. The pressure is regulated by elevating the bottle or by means of a rubber bulb, with valves, which is attached to the stopper of the bottle, and thus air can be forced into the space above the salt solution. At intervals a careful examination of the heart is made, especial attention being paid to the second pulmonic sound, with instruments in readiness for instant bleeding if this becomes too accentuated or murmurish in quality. Inhalations of oxygen in connection with infusion are given according to a special method, which is as follows: in place of the delivery nozzle usually adopted, a glass funnel is substituted, which is held by a framework resting on the bed about two inches from the face, and supplies oxygen to both mouth and nostrils without interfering in any way with the breathing. The oxygen is passed through a wash-bottle containing a pint of hot water in which has been placed one dram of an inhalation mixture, the formula of which is:

℞ Creosoti (beechwood)
Olei terebinthinae āā f 3 ss
Tinct. benzoini Comp. f 3 j

The inhalations are given at intervals whenever lips or finger tips become bluish; are continued till the color is normal, usually from ten to fifteen minutes in those who give a good reaction.

The first trial of this method was made with three hopeless cases, one of whom recovered. In other cases, both in the

hospital and in private practice, there has been a most gratifying success. Dr. Penrose remarks that patients who have been previously infused with salt solution react much better and remarkably more quickly to oxygen. This is the natural result of the increased quantity of blood circulating through the lungs, with augmented oxygen capacity.

**The Purification of
Drinking Water
by Means of Ozone**

The fact that a pure water supply is one of the necessities of a civilized community is being slowly forced upon the consciousness of city governments and their more enlightened citizens. The past few years have seen the completion and inauguration of filtration plants in a number of our larger cities. That there is still room for improvement is shown by the recent experience of so large a city as Philadelphia. The heart of the average city councilman, and we might add without seriously violating the truth, of the average citizen, is in close proximity to his pocket, and the inauguration of proper filtration apparatus, in some cities at least, has probably been deferred on account of the expense of such a plant. The method of intermittent sand filtration, the only practical one so far discovered for the treatment of large quantities of water, involves considerable outlay both for original construction and for maintenance, and it therefore behooves us to conscientiously test any method brought forward to take its place which possesses the qualifications of greater simplicity and greater cheapness with an equal degree of efficiency. That the purification of water by admixture with ozone is such a method seems likely, judging from recent reports.

In the April number of the *Annales de l'Institut Pasteur*, Calmette publishes a report on the method, and in the issue of the *Centralblatt für Bakteriologie* for July 8th is to be found a second paper on the subject by Weyl. It is not necessary to describe the apparatus used in either instance; suffice it to say that it is extremely simple, and that the process consists in merely mixing the water to be purified with ozone, to the action of which it is submitted for varying lengths of time. With regard to the results, it may be said that both Calmette and Weyl agree as to the almost complete removal of organ-

isms, and state that the water is also improved chemically. Calmette even states that the increased amount of ozone in the water improves the taste of it.

Weyl concludes his paper by remarking that although sufficient work has not yet been done on this method of water purification to place it on a firm practical basis, he would advise any city having the construction of a filtration plant in view, to carefully consider this method before putting in a costly sand filtration apparatus.

In Memoriam

JOHN ELIAS PRICHARD, M. D.

John Elias Prichard was born in Connoverin Shire, North Wales. When seven years of age he came to this country with his parents, who settled at Turin, Lewis county, N. Y. In 1854 he was matriculated in the Albany Medical College and was graduated in 1857. Drs. Armsby and Freeman were his preceptors. After a post-graduate course in Harvard University and a year in the London hospitals, he returned to Albany and married Miss Mary Jones, daughter of the late Thomas Jones. After a happy married life of but fifteen months, Mrs. Prichard died, leaving a daughter three weeks old—Mrs. Fred H. Bell of Albany.

Dr. Prichard enlisted in the navy soon after the death of his wife and was assigned to the glorious old *Kearsarge* as assistant surgeon; but at the breaking out of the rebellion he returned to Turin, N. Y. where he formed a company—Company H, Fifth Heavy Artillery, in which he was chosen first lieutenant. After a short service he was advanced to a captaincy and served in numerous battles.

In 1864 he married Miss Emma Jane Jenkins, of Baltimore, Md., where he settled down, enjoying an extensive and lucrative practice.

Dr. Prichard was surgeon of the Grand Army posts of Baltimore for a number of years and Medical Director of the Department of Maryland for three years.

Two years ago he lost his son and assistant, Dr. Hugh Jenkins Prichard. Since the death of his son his health has been failing and on the 20th of February he fell as he started to take his carriage, suffering severely with the fracture of several ribs. Two days after the accident his wife died, and one week later, March 1st, 1899, his life passed quietly away. Dr. Prichard left two sons, Harry Floyd, of the Health Board of the City of Baltimore, and John William Prichard, now of Albany, N. Y., and one daughter, Mrs. Fred H. Bell, also of this city.

Dr. Prichard was greatly interested in his *alma mater* and in a letter read at his class reunion in 1897, he stated that "We have several medical colleges in the City of Baltimore, and all taken collectively, they cannot make any comparison with the A. M. C."

He was held in high esteem by his brother practitioners and left many friends to mourn his loss.

H. JUDSON LIPES.

IRVING C. SCHUREMAN, M. D.

Dr. Schureman died of heart disease at his home in Toms River, N. J., Sunday, August 6, 1899, in his sixtieth year. He graduated from the Albany Medical College in 1869, and is survived by his wife and four children.

His classmates and others who attended the last alumni day will be shocked at this intelligence, coming so soon after the presentation of his vigorous letter upon the thirtieth anniversary of his graduation. Dr. Schureman settled in Toms River about twenty-six years ago. He held no political office. For the last twelve years he has been surgeon for the Pennsylvania railroad. He was a charter member of the County Medical Society, and for years its Secretary. He was devoted to his practice.

ROBERT A. LINENDOLL, M. D.

Dr. Robert A. Linendoll died suddenly of heart disease at his home, Fort Edward, N. Y., on July 9th, 1899. He was about the streets in the forenoon with a usual cheery greeting

for those whom he knew. At about two o'clock in the afternoon he was suddenly prostrated, and despite all aid he grew steadily worse, passing away at a few minutes after three.

Robert Addison Linendoll was born in the village of Fort Edward, September 15, 1845. He was one of the children of John Linendoll and Hannah Caldwell, his wife. In early life he studied medicine with Dr. George W. Little and graduated at Albany, and also at Ann Arbor, Mich., in 1879, since which time he has continuously practiced his profession in Fort Edward. He was married July 10, 1884, to Anna L. Nash, daughter of Hon. Melvin A. Nash. Two daughters were born to them, both of whom survive. A brother living at Garland, Pa., and a sister, Miss Antonette Linendoll, of Fort Edward, are the only surviving members of his father's family. Dr. Linendoll was elected president of the village of Fort Edward at the election last spring. Although he had often been solicited to become a candidate for various political offices he always declined, notwithstanding his party not infrequently nominated him for various positions of honor and trust against his will, but last spring he yielded to the urgent entreaty of his friends and consented to allow his name to be used as a candidate for village president.

After it was generally known that Dr. Linendoll would accept the office if elected it was generally conceded that his election was a foregone conclusion, and although the village of Fort Edward is normally republican by a good round majority, Dr. Linendoll was elected by a very flattering vote. Dr. Linendoll as a physician enjoyed a large and lucrative practice. As a citizen he was highly respected and esteemed. His kind manner and sympathetic heart endeared him to all who knew him. He was public spirited and was deeply interested in all that concerned the best welfare of the community. He possessed scholarly attainments of the highest order, and his family will have the sympathy of the whole community in their affliction. He was a member of Fort Edward Lodge No. 267, F. and A. M.; Fort Edward Chapter, R. A. M.; Washington Commandery No. 33, K. T., of Saratoga, and Oriental Temple, Mystic Shrine, of Troy.

CHARLES DE LA MONTANYE, M. D.

The medical fraternity has recently been called upon to part with one of its youngest and brightest members. Dr. Charles De La Montanye passed away Sunday, July 23d, 1899, at his home in Port Ewen, Ulster County, N. Y., after a brief illness from œdema of the lungs. He was born in Marbletown, Ulster County, N. Y., January 14th, 1866, the fifth son of Franklin De La Montanye and Blandina Ten Eyck and the seventh child in a family of eight. He felt early in life that the home nest was becoming crowded and it must be by his own efforts, if at all, that the dream of his life, which was to be a physician, could be realized. When a mere boy his aged grandfather met with an accident, dislocating his hip, which left him a helpless invalid for many months. During this time the embryo doctor was his constant and most devoted nurse. It was while watching the surgeons in attendance that he so early developed the love of surgery which afterward became with him almost a passion. He met with many discouragements in his chosen career but he inherited from his mother that good Dutch grit and perseverance which nothing could daunt and from his father a ready tongue, a facile pen and graces of mind and person which endeared him to all with whom he came in contact. His bright sunny disposition won him many friends among his class-mates and instructors; his ready wit making him the chosen orator of his class.

Dr. Montanye commenced his studies in the office of Dr. Jacob Chambers, while he was located at Stone Ridge, N. Y., and graduated at the Albany Medical College in the class of 1890. After he graduated he was associated for a short time with Dr. Chambers at Kingston, N. Y., until he found a favorable opening at Port Ewen, where, almost at once, he gained the confidence and respect of his fellow townsmen. The interests of his adopted home were ever near his heart and he became a leading spirit in all public enterprises which were likely to benefit the town or its people.

He was an active member of the Masonic order, the Knights of Pythias, the Holland Society and the Ulster County Medical Society, having been at one time the President of the

latter Society, and taking the greatest pride and interest in its affairs. He was very proud and conscious of the honor which the Society conferred upon him by electing him as their delegate to the State Medical Society for three years. He served only once as such delegate, February 1st, 1899, and at that meeting of the State Society read a paper entitled "Medical Education; its Relations to Classical Literature," which was printed in the ALBANY MEDICAL ANNALS of July, 1899.

Dr. Montayne came of sturdy, honored ancestry, being of direct descent from Dr. Johannes de la Montagnie, a noted Huguenot, who was educated at the University at Leyden, and came to this country in 1636. He was the leading physician on Manhattan Island, besides occupying many other positions of trust in the new country. He was of Dutch descent on the maternal side, his early ancestors being among the first settlers, loyally supporting their country during the revolution, devoting time and money in the forming of the new government, holding as well positions of trust and influence.

Dr. Montanye's death was hastened by his devotion to duty. Months before, his closest friends, who thought they saw signs of weakness caused by overwork, urged him to relinquish his practice for a time, going away for a change of air and rest. With indomitable pluck he stayed at his post until a sudden cold brought to an untimely end this bright young life. He leaves a widow, formerly Miss Jennie Howe (daughter of the late Warren J. Howe), a woman of charming personality, to whom he was most devotedly attached. He died a most beautiful death. Notwithstanding his intense suffering, leaning in those last dreadful hours upon that Strong Arm that had never failed him, bidding good-bye to the sorrowing friends gathered at his bedside, with the calm bravery that had ever characterized him. He was loved and needed here but Heaven loved him better and took him. There will be left to his brother practitioners and hosts of loving friends the memory of his sweet sunny ways, his faithful adherence to duty and devotion to his calling under the most trying physical weakness, feeling sure that his name is written in that blessed Book and after in large letters 'Well done, good and faithful servant.' J. HASBROUCK.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY MEDICAL COLLEGE.—The sixty-ninth session of the Albany Medical College will begin on Tuesday, September 26, 1899. The four years' graded course will be in operation during the coming semester. The students will now have greater advantages than ever before. The new Albany Hospital will be fully completed and here the students will have better facilities for practical clinical work. Its proximity to the Bender Laboratory will encourage the men to do more work in histology and pathology, where there is great opportunity for original research. We hope the time is not far distant when the Medical College building may be situated near the Hospital and Bender Laboratory.

NEW ENGLAND ALUMNI ASSOCIATION OF THE ALBANY MEDICAL COLLEGE.—Some of the enthusiastic alumni of the Albany Medical College, residing in the New England States, are about to form an *Alumni Association of New England*. The first meeting, when it is hoped that the organization will be perfected, will be held at noon September 20th, at Dr. Crother's Sanatorium, Walnut Lodge, Fairfield avenue, Hartford. All graduates of the Albany Medical College residing in New England may address Dr. Walter G. Murphy ('89), East Hartford, Conn., for further information. Let all the alumni unite to make this society a prosperous one and an honor to our *Alma Mater*.

AN EPIDEMIC OF POLIOMYELITIS.—According to the newspaper reports there has recently occurred at Poughkeepsie, N. Y., an epidemic of acute poliomyelitis. Fifty cases were reported with but one death, and this case may really have been spinal meningitis. The causation has not been satisfactorily demonstrated. The outbreak appears to be subsiding as no new cases have been reported.

AN OUTBREAK OF RABIES.—Commissioner Wieting, of the State Agricultural Department, has recently been called to Erie county, of this State, to investigate an outbreak of rabies reported there. It is said to be the worst general outbreak which has occurred in many years. A large St. Bernard dog, owned by a man living in Albion, traversed the country for a distance of forty miles before he was shot. People, dogs, horses and cows are suffering, and several persons have been sent to the Pasteur Institute in New York city for treatment.

DIPHTHERIA AT THE WILLARD STATE HOSPITAL.—The epidemic of diphtheria at the Willard State Hospital has now entirely disappeared. The New York State Board of Health ordered a rigid quarantine of this institution. The disease was of a mild type and thirty-four cases were reported—comparatively a small number for the 2,000 inmates—with no deaths. Antitoxin was used liberally and Dr. Macy and his corps of assistants are to be congratulated for the systematic and successful manner of attacking the disease.

THE NEW YORK UNIVERSITY VETERINARY COLLEGE.—It has recently been decided to consolidate the New York Veterinary College and the American Veterinary College with the New York University. The members of both faculties resigned and a new faculty was appointed, principally from among their number, with Professor Alexander F. Liantard, of the American Veterinary College, as dean. The new school will open its first term October 2nd at the College building, 141 West Fifty-fourth street.

PROFESSOR ROENTGEN CALLED TO MUNICH.—Professor Roentgen has received a call to the chair of Physical Science at the University of Munich, Bavaria. It is not thought that he will leave Würzburg, where he occupies the same chair, for he has recently refused a call to the University at Leipsic.

INVESTIGATION OF THE "DIVINE HEALING" METHOD BY THE ILLINOIS STATE BOARD OF HEALTH.—As a result of the disclosures made concerning the death of Mrs. Annetia Flanders, who was treated with "divine healing" by a Mrs. Bratz, the State Board of Health of Illinois has decided to institute an investigation of the "divine healing" method, as carried on by the Lion Home and the Divine Healing Mission of Dr. John Alexander Dowie, under whose direction Mrs. Bratz practices. A suit is to be entered by the counsel for the Board against Mrs. Bratz for practicing in the Flanders case without a license. Steps will also be taken immediately to revoke the license of Dr. John G. Spelsher, who is an official of the Dowie Institute, on the grounds that the latter has made a practice of signing death certificates without finding out the cause of death. The outcome of this case will be watched with much interest both by the laity and the medical profession.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.—The twelfth annual meeting of the American Association of Obstetricians and Gynecologists will be held in the assembly room of the Denison House, Indianapolis, Indiana, Tuesday, Wednesday and Thursday, September 19, 20 and 21, 1899. The Association will meet in executive session with closed doors on Tuesday, September 19th, at 9:30 A. M., for the election of new Fellows. The annual dinner will be served at the Denison House at 7:30 P. M., Wednesday. The permanent program had not been issued at the time of going to press, but the preliminary program gives promise of many excellent papers and a most enjoyable meeting.

EL PROGRESO MÉDICO.—The initial number of the ninth volume of *El Progreso Médico*, published in Havana, appeared in July. This is not an entirely new journal but its publication has been suspended for some time on account of the late Cuban war. Dr. Gabriel Casuso is editor with Drs. Enrique Nunez and Ernesto Aragón as assistants. This journal is well printed, on good paper, and contains several illustrations. To Spanish readers this journal will be of special value, particularly to those in our Southern States who are interested in tropical diseases. We welcome the re-appearance of this journal and trust it may be successful in its new career.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—With the near approach of the annual meeting of the American Electro-Therapeutic Association, to be held on September 19, 20 and 21, in the city of Washington, under the presidency of Dr. F. B. Bishop, the local committee of arrangements is redoubling its efforts to make it a success. Many electrical manufacturers will be represented in the Exhibit Hall, and information will be freely given. Papers have thus far been promised from Drs. R. G. Nunn, A. D. Rockwell, Margaret A. Cleaves, F. J. Levisieur, Walter White, Robert Reyburn, G. A. Corson, C. O. Files, J. H. Kellogg, John A. Licthy, W. W. Scheppegegrell, L. Howe, E. Wende, F. B. Bishop, Robert Newman, W. J. Herdman, G. B. Massey, and Profs. Bergonie, of Bordeaux, Apostoli and Dolbear, of Paris. With such authors a successful meeting must result.

MEDICAL EDUCATION IN KENTUCKY.—The State Board of Health of Kentucky has given notice that it will hereafter refuse to recognize, as a basis for certificates to practice medicine, diplomas from any medical college which does not in good faith comply with the requirements of the American Medical College Association, the American Institute of Homœopathy, and the American Eclectic Medical College Association, respectively, both as to preliminary education and four years' course of study. This means that no school that graduates three year students will be recognized in Kentucky hereafter. The Board provided an examination for three years graduates of the present year, as many of the students had attended such schools in ignorance of its advanced requirements, but found this course unsatisfactory, a large percentage of the examinations indicating incomplete preliminary education as well as imperfect medical training. This standard for the State of Kentucky was made and promulgated in 1891 to take effect the present year, but is again published that schools patronized by Kentucky students and future graduates expecting to practice in the State may fully understand the requirements of the Board.

RESEARCHES IN TROPICAL DISEASES.—Since tropical countries are being opened up to civilization the interest in diseases peculiar to the tropical climate are receiving considerable attention. The committee of the Société des Etudes Coloniales of Brussels, Belgium, has offered two prizes for successful investigations in malaria, each of the value of \$500. The first is to be awarded to any one who shall considerably advance our knowledge of Laveran's hematozoon malarie in its cycle of existence, either within or outside of the human body. The second is to be conferred on any one who shall determine the exact etiology of the so-called malarial hemoglobinuria, the *fièvre biliaire hémoglobinurique* of the French.

The expedition sent out by the Liverpool School of Tropical Diseases, under the command of Surgeon-Major Ross, for the investigation of malaria in South Africa, sailed on July 29th.

The colonial department of the Belgian government has recently received \$10,000 for the purpose of furthering investigation in "colonial pathology." The committee of the Société d'Etudes Coloniales at Brussels

was appointed to consider the best manner of making use of the gift. As a result, an expedition will be fitted out to be sent to the Belgian possessions on the Congo in South Africa, for the purpose of studying the diseases of tropical climates in that region. Dr. Van Camphenout has been selected as the head of the expedition.

NEW YORK STATE CIVIL SERVICE.—Open competitive examinations will be held upon September 30, 1899, for positions of physician and apothecary in the State service, announcement of which is printed on another page.

Book Reviews

Diseases of Women. A Treatise on the Principles and Practice of Gynæcology for Students and Practitioners. By E. C. DUDLEY, A. M., M. D., Professor of Gynæcology in the Chicago Medical College, Chicago, etc. With Four Hundred and Twenty-two Illustrations, of which Forty-seven are in Colors and Two Colored Plates. Lea Brothers & Co., Philadelphia and New York. Octavo., Pp. VI-637.

At a time when so many excellent treatises on gynæcology have made their appearance, a book to be satisfactory must be of high rank; but such a work we would expect from the pen of Dr. Dudley, and we have not been disappointed. The arrangement of the work is somewhat novel, but for a student or one who has not been accustomed to the usual arrangement, it is most desirable.

The book is divided into five sections. In the first General Principles are considered, including the physiology of the subject. The review of pathology and the methods for securing sepsis and antisepsis are clear and forcible. The chapter on Diagnosis is up-to-date, containing a full description of Dr. Kelly's method of intra-vesical inspection. Local treatment is fully considered but, according to the author's view, it is not of special utility. In the second division Inflammations are considered. This part is especially well written and clear. The indiscriminate use of pessaries, swabbing of the vagina and similar measures are depreciated by the author. We do not see the need of occupying valuable space with illustrations of such familiar instruments as the Sim's speculum, etc. The description of the use of tents for dilatation of the uterus might also be omitted since they have been almost entirely supplanted by the more rapid and more satisfactory instrumental dilatation.

Tumors, tubal pregnancy and malformations are considered in Part III. The writer believes that vaginal removal of myomata, with preservation of the uterus when possible, is the best treatment for that condition and he describes an original method. Electrical applications and ligature of the uterine arteries have not been at all satisfactory in his hands. Extra-uterine pregnancies, according to the author, are always first tubal and secondarily are found in other positions. Chapter IV is of special interest to obstetricians, and is a most practical consideration of traumatic condi-

tions of the cervix, vagina and perineum and their treatment. The book concludes with a chapter on pelvic massage, a subject which, we believe, is not now considered of much importance.

Considered as a whole we are pleased with this work and can heartily recommend it to students and practitioners as a model text book. It is a convenient volume, including only the most approved principles and practices and excluding whatever is not founded on pathology or carefully observed experience.

H. JUDSON LIPES.

The Gross and Minute Anatomy of the Central Nervous System. By H. C. GORDINIER, A. M., M. D., Professor of Physiology and of the Anatomy of the Nervous System in the Albany Medical College; Member American Neurological Association. With 48 full-page plates and 213 other illustrations, many of which are printed in colors, a large number being from original sources. Published by P. Blakiston's Sons & Co., 1012 Walnut street, Philadelphia, Pa. Pp. 589. Price, \$6.00.

This book is evidently the result of an immense amount of labor and of original research, and it is remarkable that a practitioner should have found time in the intervals of a large practice to produce it. It is quite safe to say that the anatomy of the nervous system has never before been presented so completely by any English or American author. The whole subject from the simplest histological elements of nervous tissue as they are arranged in the relatively simple structure of the spinal cord, up through the labyrinth of the medulla, the pons, the cerebellum and the other ganglia at the base of the brain to finally the intricacy of the cerebral cortex is developed and described in an orderly and scientific manner. The course of the different bundles of fibers which convey impressions so varied in their effects to so many different points are traced from their start to their finish. There is a complete exposition of both cerebral and spinal localization, including the author's contribution to the localization of the center for writing, which contains the very latest discoveries in this field, and finally the book closes with an account of the embryology of the nervous system and a short description of the more important methods of staining and preparing nervous tissues for examination. The book is handsomely printed on unusually good paper which brings out with great distinctness the minute details of the illustrations, many of them original, with which the book abounds so profusely (they are 271 in number) that they occur on almost every page.

Certainly American medical students are to be congratulated on having such a reliable guide through such an intricate and important domain in medical science and the older practitioner may turn to it with confidence that he will find in it the latest information. We trust that the book will have the widest circulation, usefulness and success.

H. H.

Laboratory Work in Bacteriology. By FREDERICK G. NOVY, Sc.D., M.D., Junior Professor of Hygiene and Physiological Chemistry, University of Michigan. Publisher, George Wahr, Ann Arbor, Mich. 563 pages.

The number of theoretical text-books upon bacteriology is already considerable and they fulfill the purposes of their intent in a large measure full well; the necessities of practical teaching, however, have created a demand for a class of books which whilst developing the theoretic aspects of the science concomitantly serve the purpose of a working laboratory guide, such for instance as would meet the requirements of medical students.

In the book before us both phases go hand in hand. This edition, which is the second, is thoroughly revised and greatly enlarged. The opening five chapters deal with the biology of bacteria in its most generous sense; the following four with technical considerations of neighborly interest to the practical science. The relation of bacteria to disease, and methods of infection receive in the forty-one pages which follow ample treatment and justice; insistence upon the important clinical bearings of the subject is obvious. Chapters XI and XII take up about 137 pages with descriptions of pathogenic bacteria and yeasts, moulds, and streptotrices. Methods for the examination of water, soil, and air are described in the thirty succeeding pages. Those making use of the book will have every reason to regard themselves fortunate in finding descriptions of some features of special technique which can only be found in brochures. The most important of these—a method so fertile in its results in the hands of Nocard and Roux and the final possibilities of which in the realm of experimental research are but vaguely apprehended with conditions as new as they are recondite in their interpretation—is the utilization of collodium sacs which permit of chemical interchange between the contents and animal fluids without, but the walls of which with relation to the bacteria are impervious.

Without any fear of accusation from the side of exaggeration we unreservedly recommend this guide as the very best, meeting the demand of the beginner in theory and the novice in practice.

AUGUST JEROME LARTIGAU.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Ætiology of Appendicitis.—WEISS and FERNIER (*Centralb. f. Chirurg.*, 22 April, 1899). Upon the basis of a careful examination of 22 of their cases which were operated upon for epityphlitis the authors have come to the conclusion that this disease arises generally from a lymphangitis occurring at the same time with an infectious folliculitis of the vermiform appendix. For the purpose of giving in detail the history of the disease they repeat the various forms of the acute epityphlitis for which they have operated in three cases with one death, and the chronic recurring variety for which they have operated 19 times with always favorable results, and both hold to the heroic surgical treatment, namely, to operate either very soon before the occurrence of a general peritonitis or formation of an abscess, or else

very late after the subsidence of the acute inflammation. These indications concur also with those adopted by the majority of German surgeons with whom they agree also regarding the operative technique. E. A. V.

Prostatectomy.—Dr. PARKER SYMS, of New York, in the *Annals of Surgery for March, 1899*, discusses the aims and limitations of seven of the main surgical procedures for removing the prostate gland. Suprapubic prostatectomy does not meet his approval since all methods are open to certain serious objections, some of the principal of which are the fact that the floor of the bladder is more or less extensively wounded, that the cavity from which the prostate is removed becomes at once part of the bladder-pouch, and thereby a dependent receptacle for urine and exudates, thus rendering infection not only possible, but probable. This objection is not overcome when perineal drainage is resorted to, because the pouch still continues below the level of the tube within the bladder. Perineal prostatectomy as devised by Zuckerkandl, Dittel, Rydyier and others is believed anatomically excellent, but practically too complicated and prolonged. Nichol's method of combined suprapubic cystotomy and perineal prostatectomy Syms considers insufficient and the incision unnecessarily elaborate.

Alexander's operation of perineal prostatectomy and suprapubic cystotomy with perineal drainage is in the writer's opinion the best method so far practiced. Dr. Syms modifies this operation by entering the peritoneum just above the vesical fold by an incision large enough to permit the operator with one hand to press the enlarged prostate well into the perineum without opening the bladder. The rest of the operation is carried out in the usual manner. The high death rate following removal of the prostate gland is attributed to too tardy intervention.

An Enormous Varicose Tumor of the Abdominal Wall.—LEJEUNE (in *Virchow's Archiv*, Bd. 155, Hft. 2) describes a very large varicose tumor of the left side of the abdomen. It occurred in a man of 57 and was accidentally discovered in examining him for fracture. Since birth he had had an angioma on the left side, but until after he was forty it had shown no signs of growth. When seen by Lejeune there was a tumor extending from the umbilicus round the left side to the spinal column. The tumor varied in breadth from 8 to 25 c.m., and projected from the abdominal wall 12 c.m. at the highest point. It was made up of a mass of enormous varices which were not sharply limited either at its upper or its lower limit. Studding the surface of the mass, which was bluish in color, were more than 50 large and small steel blue, knobby, cavernous angiomas. The tumor did not produce marked pressure symptoms, though it had compressed the lower ribs. Deep breathing was rather difficult. Sneezing, coughing, etc., caused increased stagnation of blood in the tumor. Pulsation could be felt in places on the surface. On account of the age of the patient and the size of the tumor operation was not advised.

The Lymph Vessels and Lymphatic Glands of the Tongue and their Relation to the Extension of Carcinoma of the Tongue.—By KÜTTNER. (*Wiener med. Wochenschr.*, 48, 1898). The author comes to the following conclusions:

The tongue is very rich in lymph channels, and the lymph of one-half of the tongue flows down to the glands on both sides. The mucous membrane and deeper tissues have the same outlets for the lymph. These copious lymph channels go through the muscles of the tongue or lie close against the muscles. The lymphatic glands of the tongue are the submaxillary, the deep cervical, the small lingual and the glands between the genio-glossi muscles. Of particular importance are the submaxillary and the deep cervical glands. There is direct lymph channel communication between the tongue and the supraclavicular glands. The following glands do not belong to the lymph area of the tongue: the submental, the superficial cervical and the glands around the parotid. But these glands have a connection with the submaxillary and the deep cervical. The lymph channels of the neighboring organs of the tongue, empty into the same glands as the lymph vessels of the tongue. A lymph channel communication between the tongue and salivary glands could not be determined, although in some cases the salivary glands are degenerated in carcinoma of the tongue.

In every case of carcinoma of the tongue, the glands should be thoroughly removed. All the glands belonging to the lymph area of the tongue must be taken out, i. e., on both sides, the submaxillary, the submental, the deep cervical and perhaps the supraclavicular. It is advisable also to take out the submaxillary salivary glands and the lower end of the parotid.

MEDICINE

Edited by Samuel B. Ward, M. D.

The Thyroid Gland and Myxœdema.—Wm. MENKE (*Centralb. f. Chirurgie; Berliner klin. Wochenschr.*) says that an unusually careful and detailed study of the behavior of the thyroid gland in myxœdema when collected together gives the following results:

1. The external examination and the medical history of the dissection shows that a diseased condition of the thyroid gland regularly occurs in myxœdema, that it is found, however, also in autopsies that it occurs as a regular accompanying symptom in the physiological condition of old age and also as the chief exciting cause in younger individuals.

2. In diseases of the thyroid gland which cause an atrophy of the gland substance, myxœdema has not, up to the present time, been observed as an accompanying or following symptom.

By a thorough search of the literature, Menke could not find a case of pure myxœdema in which the disease of the thyroid came first and then the typical complex symptoms had occurred except in the case of total extirpation of the thyroid followed by post-operative myxœdema. After which it is statistically proven that myxœdema need not occur in every case after total extirpation, therefore according to Menke's view the thyroid gland cannot be the cause of the myxœdema or else its functions are taken up by another organ. Confirmatory evidence of this later fact has been wholly lacking up to the present time.

As the chief cause, Menke found in his examinations, disease of the

capillaries and at the autopsy the never-failing arteries with atheroma and to be sure sometimes also amyloid degeneration with small hemorrhages into the vessels. The disease of the vessels as primary or as the result of a disturbance of nutrition and change of matter would, according to Menke's idea explain in full the symptoms of myxœdema. Menke holds it therefore as very necessary to give to the vascular system, by a thorough examination, a greater attention than has been given to it up to this time.

E. A. V.

Kernig's Sign.—In the Cavendish lectures, Dr. OSLER refers to Kernig's Sign as follows (*British Medical Journal; Boston Med. and Surg. Jour.*, July 6 and 13, 1899): This interesting sign has not attracted the special attention of English and American physicians, though J. B. Herrick, of Chicago, at the last meeting of the Association of American Physicians, spoke of its value. It has been present in all of our cases in which it has been looked for. It is, I think, an old observation that the subjects of protracted meningitis, particularly children, very often lie with the thighs flexed upon the abdomen, and with the legs in a state of partial contraction, so that they are with difficulty extended. To test for Kernig's sign the patient should be propped up in bed in the sitting position, then, on attempting to extend the leg on the thigh there is contraction of the flexors which prevents the full straightening of the leg. On the other hand, in recumbent posture the leg can be fully extended. Many patients with meningitis are not in a condition to sit up, and the test can be equally well made by flexing the thigh on the abdomen, when attempting to extend the leg, if meningitis is present, the limb cannot be fully extended. Friis found the sign in 55 or 60 cases, and Netter in 45 or 50. It is stated to be present in all forms of meningitis when the spinal meninges are involved. The presence of the sign is no indication of the intensity of the spinal involvement, as it existed in a very marked degree in a recent case of pneumococcic meningitis, in which there was no positive exudate on the spinal meninges, only a turbid fluid. Netter's explanation of the phenomenon is as follows: "In consequence of the inflammation of the meninges the roots of the nerves become irritable, and the flexion of the thighs upon the pelvis, when the patient is in the sitting posture, elongates and consequently stretches the lumbar and sacral roots, and thus increases their irritability. The attempt to extend the knee is insufficient to provoke a reflex contraction of the flexors while the patient lies on his back with the thighs extended upon the pelvis, but it does so when he assumes a sitting posture."

PSYCHIATRY

Edited by G. Alder Blumer, M. D.

The Early Diagnosis of General Paralysis of the Insane.—Under this title SCHWARZ (*St. Petersb. med. Wochens.*, 1899, No. 4) discusses pupillary anomalies with especial reference to their relations to the incipient stages of general paralysis. General paralysis usually presents a row of symptoms which permit an easy diagnosis, but in its incipency, when the chance

for amelioration is afforded they are so ambiguous as not to be of service in the differential diagnosis. This is especially true of the mental manifestations. Certain bodily symptoms, however, may give warning, and chief among these are the changes in the pupils, especially the variations in their reaction to light. The writer examined fifty early cases of paralysis, and found that in four there were no pupillary reactions; in sixteen there was isolated double-sided immobility to light, that is, neither pupil reacted to light, although both responded to convergence and accommodation; in seventeen cases the reaction was more or less sluggish, so slow that it could only be seen with a magnifying lens, or it was withheld in one eye and present in the other; and in thirteen cases the pupils were normal. The author then reviews the literature of this subject, including observations upon a much larger number of patients. The reflex palsy may be one-sided, but is generally double; Gowers has noted in a case of locomotor ataxy a qualitative reaction, in which the pupil responded promptly to light, but immediately dilated, and to a greater degree than before the contraction; there may be cited as a curiosity the so-called paradoxical reaction, in which the pupil dilates instead of contracts upon the exposure to light, hippus has also been once observed, but as this condition is generally physiological, or when pathological, may stand for neurasthenia, acute meningitis, hemiplegia, multiple sclerosis, and other conditions, its significance must not be misinterpreted.

Reflex pupillary immobility has been found also in locomotor ataxy, senile dementia, alcoholism, focal cerebral lesions, cerebral syphilis, traumatism of the head, epilepsy, hysteria and paranoia. The relations of this symptom with locomotor ataxy complicated by mental symptoms is especially interesting. In one such case seen by the writer, the patient was profoundly melancholy; his history showed that in youth before the acquisition of syphilis he had suffered from melancholy, and his case record thus shows that the combination of symptoms does not justify the anticipation of general paralysis. As in all the cases the greatest number by far were those of general paralysis, the author is justified in attaching great importance to the pupillary manifestations. He summarizes as follows:

1. In the great majority of cases of insanity in which reflex immobility of the pupil is present the diagnosis of general paralysis is justified (92%).
2. In the great majority of cases of general paralysis (70%) isolated reflex immobility of the pupils is found.
3. Isolated double-sided pupillary immobility is characteristic of general paralysis. Still in the earliest stages a limitation of the pupillary reaction may have a similar significance as above—(1).
4. Immobility of the pupils combined with failure of the convergence reaction does not negative the diagnosis of general paralysis.
5. Isolated double-sided pupillary immobility may exist for years without the development of general paralysis or locomotor ataxy.
6. It is an early symptom of general paralysis, and has been seen for years before the ensuing general paralysis has developed.

ALBANY MEDICAL ANNALS

Original Communications

AN INQUIRY INTO THE ORIGIN OF THE PNEUMONIAS OF SUCKLINGS IN THE COURSE OF DISEASES OF THE GASTRO-INTESTINAL TRACT AND IN SEPTIC INFECTIONS.*

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Translated for the ANNALS by H. L. K. Shaw, M. D.

In Professor Escherich's Hospital for Children at Graz, I undertook investigations last October which bear a close relation to the topic we are considering (*Septic Infection in Early Infancy*). I take the liberty therefore to use out of my work that which is sufficient for the present occasion. The complete account will appear later in another place and form. Affection of the lungs, one of the most frequent and fatal complications in diseases of the first year, have not yet been made the subject of much thorough investigation, that is in an ætiological and histo-bacteriological sense. I shall speak here only of the pneumonias occurring in diseases of the gastro-intestinal tract and in septic-cachetic conditions. Recently the lung complications occurring in the course of various diseases of the alimentary tract have been designated partial manifestations of a general anto-infection from the bowels. Undeniable proof of this view has not yet been adduced either

*Read at the 71st meeting of German Scientists and Physicians held in Munich, September 17 to 23, 1899.

by the French, who were its first champions, or by the well known later works of Czerny, Moser and others. I cannot go further into details in the history of this question.

In an undeniable sepsis, one in which the infection of the blood comes from some external entrance point, the lungs can become compromised by sharing the inflammation. The well known clinical condition makes this evident. I will here refer you to Fischl's account of septic infections. But have we a septic infection in every case of pneumonia occurring in sucklings suffering from diseases of the gastro-intestinal tract? The question naturally presents itself if the origin of such infection can be traced to the intestines.

I will first briefly give a synopsis of my observations on the intestine. I found in the normal gut the epithelium well preserved, beautiful long glands and well differentiated connective tissue. Bacteria were present only on the outer superficial surface of the mucous membrane. This is the physiological state. In cases where there had existed a catarrhal condition of the intestines with superficial lesions I found that bacteria were also present on the outer surface of the mucous membrane. These were more or less thickly diffused in the catarrhal mucus, in the openings of the glands, and in the superficial abrasions. I could not find them in the deeper tissues; in the lymph apparatus, and in the mesenteric glands. A number of cases were separated from the others, in all of which there existed a special pathological infection, in some measure a specific cause. In these cases certain varieties of bacilli and streptococci appeared to develop a special activity. The delicate glandular layer falls a victim and in this layer we always find necrosis and ulcerative processes. These bacteria following the tissue fluids keep advancing and are only checked by the more compact layers, as the muscular tissue, or by a strong proliferation of round cells. Some observations showed an actual penetration of the intestinal wall as far as the serosa. This happens especially in the lower intestinal tract. We know that for diseases like colicystitis this portion has a special significance.

From this it does not follow that the lung infection must come from the intestine. To the claim that infections through the serosa of the intestines are frequent it can be said that

peritonitis ought to belong to the principal appearances of these infections in about the same frequency. Proof is wanting that the virus is transmitted to the veins of the lungs by means of the lymphatic apparatus. The anatomical findings speak against this. This supposition is, moreover, unlikely and improbable. Admitting that a general sepsis might follow enteritis of malignant origin, and I myself have observed such mixed disease conditions, yet the frequent simple cases remain without explanation. These are the cases which terminate in pneumonia after a longer or a shorter course of intestinal diseases ranging from dyspepsia to enteritis. I need not unroll the clinical picture of these cases here. I have made histolo-bacteriological examinations in about thirty of these cases. In all of these I had knowledge of the clinical history. In the earlier stages there was a great abundance of blood in the lungs. Consolidation affecting from single to numerous lobules was found in the greater number of cases. The mucous membrane of the bronchi was highly reddened and contained pus. The microscopical picture, briefly described, is concerned with small patches of infiltration. In the early stage the alveoli and bronchioli are filled with round cells and the surrounding connective tissue is comparatively free. Later the exudate is mixed with epithelium, is often serous in character, and the compression greatly blurs the picture of the tissue. The capillary system is correspondingly either very rich in blood or almost empty. Compression and resorption atelectasis appear beside each other. Only in the most extended inflammations does the round cell proliferation extend over the borders of the lumina until finally greater homogeneous round cell deposits appear. Almost all the bronchi contain pus cell exudate. In many cases this saturates the layer of the epithelium, loosening and removing it so that the epithelium of the lower parts suffers a variable degree of destruction and cells of embryonic type grow abundantly in the place of these epithelial cells. A distinct round cell infiltration often appears in the walls of the larger bronchi between the submucous and cartilaginous layers. In general the interlobular and scanty interalveolar connective tissue takes no part. The vessels are normal and correspond to the age of the infant. Hæmorrhages and

small foci of vicarious emphysema appear as a consequence of the epithelial destruction. Bacteria were found in the pus of the bronchi, in the alveolar exudate, between the cast off epithelial cells, etc. These existed in variable quantities and were irregularly divided or in clumps. These bacteria were in a great part similar to those micro-organisms which either belong to those found in the fæces of the patient in question or had played some essential part in other portions of the body. These were absent in the vicinity of the vesels, in the majority of the lymph spaces, and seldom came into connection with the tissues.

In a group of aphthæ infections I obtained typical pictures of inspiration pneumonia. The larger bronchi showed great inflammatory changes, with pus, epithelial destruction and a high grade of round cell infiltration. In the lower portions of the lung the capillaries were engorged and the exudate was slight and rather mixed. Aphthæ elements were found in great abundance in the larger bronchi. In the smaller branches they were more dispersed and mixed. Atelectasis was present everywhere. One will hardly be able to imagine the presence of this thrush infection otherwise than by its penetrating actively or passively into the bronchi. I can present other proofs which I have observed in cases of undoubted septic pneumonia where intestinal changes were absent. The small infiltration foci were here also but differed in that the extension of the process took place between the connective tissue so that the pleura often becomes much infected. The distributions of the micro-organisms in this tissue is in rows, clusters, or diffuse. Where there was no mixture of the different processes the bronchial epithelium was in comparatively good condition and the character of the exudate was more serous, mixed and often fibrinous. The extreme capillary hyperæmia often gives rise to hæmorrhages. The larger vessels are normal and here and there we find abscesses.

It was quite natural that I came across cases that stood between the two groups and which were results of the mixing of both processes. The lower lymph channels in three cases exhibited a striking participation by an accompanying inflammation of the true parenchyma of the respiratory tract. In

these cases the view of Hutinel and Claisse that septic infection extends from the inner surface of the breathing apparatus does not seem improbable. Bear in mind the known descriptions of broncho-pneumonia resulting from inhalation and aspiration and then the pneumonia occurring in diphtheria, aphthæ, and similar affections. With these compare our histological findings, the bacteriological details, and their visible difference from that in septic pneumonia. Then recall the clinical condition, the cachexia, the frequent vomiting and gagging, the diminution of the pharyngeal and laryngeal reflexes, the defective secretions on one side and the absent expectoration on the other side, and the inhalation of germs from the air infected by the suckling itself and so on. All this goes to show that the pneumonia occurring in sucklings suffering from gastro-intestinal diseases originates from the bronchi by a very natural and simple infection. I must unfortunately be brief with the pro and contra of this conclusion. An article by Baginsky which treats of the pathology of diarrhœal diseases forms an essential support of my investigations and our findings agree in many particulars. Unfortunately I did not obtain this article until the close of my work.

We must assume that in an inflammation beginning in the upper air passages with its attending mucus and detritus, the new and original micro-organisms which have been taken from the air and swallowed in quantities are carried along in this same mucus and detritus. These are carried deeper in the lungs in consequence of a weak development of the muscular system, a long continued lying on the back, and the circumstances mentioned above. The more the smaller bronchi are filled so much greater is the resulting infiltration atelectasis.

If the explanation of infection through the bronchi be correct then it is much simpler than that which claims a wandering of the micro-organisms through the intestine, especially since this latter view has not been proved. Charles West, over sixty years ago, presented this view of broncho-pneumonia occurring in gastro-intestinally diseased sucklings with convincing minuteness. Why have his assertions been contradicted without forcible reasons? I must refrain from making an analysis of the bacteriological details of my work and of

dwelling upon other questions here just touched upon. I will, however, indicate the unimportant role that the pneumococcus takes in the pneumonias in question, concerning which I have been convinced by the classical animal experiments. I must do so because Dürch's bacteriological results in the different pneumonias of children differ from the histological results in my cases. The difference of the subjects will explain this without going further into details. I cannot give in this short paper many proofs of my investigations. From their results, however, I do not hesitate to assert:

1. That the greater number of lobular pneumonias occurring in the course of gastro-intestinal disease in sucklings are essentially bronchial infections aided and abetted by the outer and inner disease condition.

2. That the most unfavorable cases may become the source of a sepsis as all the disease conditions may mingle in mutual dependency.

3. That they moreover must be separated completely from septic diseases and cannot be termed partial manifestations of gastro-enteritic general infection carried through the system by the lymph channels.

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WHEN TO OPERATE IN APPENDICITIS.*

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Probably no one disease has received so much attention from the pens of medical writers in the past three years as has the one appendicitis. You can scarcely find a single medical journal, in each issue of which there is not some reference to this trouble. So much has even been printed in the daily

*Read by invitation before the Schoharie County Medical Society, Schoharie, June 6, 1899.

newspapers and magazines, that the layman is often suspicious of his ailment when he summons his physician. A large percentage of them are aware also that it is of a surgical nature, for you can scarcely talk with a person who does not know or has not heard of some one who has been operated upon for appendicitis.

It is, then, highly important to the practitioner that he be not only able to diagnosticate the disease, but know when to operate, or call surgical aid. It is the failure to appreciate when to do this among general practitioners, who see the cases first, that is responsible for the high rate of mortality accredited to this the most common of all abdominal diseases.

Considerable diversity of opinion exists among medical men as to the proper treatment of appendicitis; a very few (and I am glad they are few) go so far as to say that the treatment is wholly medical, and that no case should be operated upon. The majority think that only certain cases require surgical intervention, while others would advise it in every case the moment a diagnosis has been made. The latter we call extremists.

The percentage of mortality in cases operated upon under favorable circumstances, with our present aseptic and antiseptic precautions, is, in the hands of our best surgeons, about five from all causes.

No living man, regardless of his experience, can tell for an absolute certainty, the cases that will recover without surgical aid, and those that will not. Why, then, not operate on them all the first day of the disease, or as soon as the diagnosis is made, as the chances of cure are 95 in 100? Simply because it is not practical with the present education of the masses in regard to the seriousness of this affection and the morbid fear they have of the surgeon's knife; as well as for the reason that every case does not require operation.

Operations for appendicitis are becoming more frequent as the people become more enlightened by advice of their up-to-date physicians, old and young, as to the seriousness of the malady. Nowadays, after the case is plainly stated to the sufferer, he will often consent to an operation at once, while only one or two years ago it not only required the strongest urging by his physician and consulting surgeon, but

the moral persuasion of his relatives and quite often his spiritual adviser. So frequent, in fact, have they become that there are those uncharitable enough to say that it is a fad. It is not a fad, it is due to the thorough awakening of the physicians and patients that operation offers the only sure cure in the vast majority of instances.

When we consider that 95 per cent of all abdominal cases, in males, in which peritonitis develops, not due to traumatism, have their origin from the vermiform appendix, it is apt to impress us with its frequency and its gravity. The same ratio does not hold good in females, owing to the chances of infection through the genital tract, but it does in a relative way.

I am convinced, after practical observation during my four years' association with Dr. Macdonald, and by the courtesy of Dr. Vander Veer, of over 800 cases of appendicitis operated upon, and many more that were not, involving all varieties and stages of the disease, that no cast iron rule can be laid down for the guidance of general practitioners of medicine, that would apply to each and every case as regards just when operation is indicated.

It would be impossible to make one that would not be open to criticism by a surgeon having large experience in dealing with this class of cases. It is therefore understood that the indications for operation herein stated are not without exception. I believe, however, that if the advice given here is rightly followed, and the surgeon allowed to make the exception, the deaths from appendicitis would be very materially decreased, and many a useful life saved.

Symptoms, diagnosis and treatment will only be considered in a way relative to the subject of this paper. There are no recognized conditions that render the patient susceptible to this disease unless we consider indigestion, sedentary habits, constipation, or frequent diarrhœa, as some, yet it occurs frequently in the athlete, the person with a digestion that would bring the blush of shame to any self-respecting ostrich. Age is no barrier; it is by far most common between the ages of seven and thirty, yet I have seen it in a child of two and a man of seventy-five years of age. The etiology is obscure.

That the diagnosis is easily made in most cases cannot be disputed, as much the same symptoms are present in the

ordinary ones, only varying in degrees of intensity. Probably no one symptom has so much importance attached to it, in the minds of the general practitioners, and is of so little importance, as is that of temperature; it is practically of no importance in the early diagnosis of appendicitis and when it is present in the first few hours of the onset of the disease, it is indicative of a serious inflammation of the appendix and should stimulate the doctor to active measures.

It is presumptive evidence of beginning gangrene of the appendix, through the walls of which the bacteria colli communis are migrating, setting up what is now a localized or beginning general peritonitis. Necrosis with perforation may be at hand, or it may be that perforation has already occurred, as evidenced by this symptom associated with severe sharp colicky pain, with nausea and vomiting. Presence of shock is indicated by rapid pulse, frightened, anxious expression on the face of the patient, the so-called facies abdominalis. Chill is a comparatively rare occurrence in any stage of appendicitis. I have known patients to die with a normal temperature; they frequently die with a temperature that has never reached one hundred. Later in the disease the development of temperature is significant of the formation of pus.

Pain and tenderness, the first and most important symptoms are often sufficient in themselves for diagnosis; the severity of the pain is not always in relation to the severity of the disease. In about one-half of the cases the pain is referred at first to the region of the umbilicus, but pressure over the location of the appendix will always show it to be the real seat of the inflammation. It must be remembered that the so-called McBurney point is not invariably the location of the appendix, as it has been found extending over beyond the median line on the left side, and as high up as the lower border of the liver on the right side. It is, however, in the vast majority of cases from within one to three inches of this established point.

Very frequently the process of slow ulcerative perforation goes on through the mucous lining and the adenoid layers of the appendix without any pain or other symptoms until the peritoneal coat becomes involved, which only requires, seemingly, an hour or two for its perforation. This is particularly

true if situated near the junction of the appendix to the head of the cæcum. This allows the immediate escape of the concretion together with the contents of the intestinal canal into the general abdominal cavity, setting up an immediate peritonitis; and in this class of cases general abdominal pain, never localizing itself to the region of the appendix, leads many into error as to the true condition.

Five cases in the last month, in the practice of Dr. Macdonald have been of this character. All five of these cases were operated on within two hours of the time they were first seen by the consulting surgeon. A period of from two to five days had elapsed since first they came under the care of the family physician and only two of the five remain alive to tell the tale.

This is the most rapidly fatal form of the disease, and usually comes under the care of the attending physician within a very few hours of the onset, for the relief of pain. If there is any one variety in which operation should be undertaken at the earliest possible moment, it is this one. The next day will not do; do it that day, at 8 o'clock at night or at 2 o'clock in the morning, or the first train that will bring some one prepared to do a laparotomy. These cases will not wait. There is no one symptom that is as reliable and so indicative of a serious abdominal lesion, as the rigid condition of the abdominal walls, imparting to the touch a board like feel. This is of itself of sufficient importance to warrant grave apprehension on the part of the physician, for nothing less than an abdominal condition threatening life, can account for this reflex contraction.

These cases, if operated upon, even with the presence of the last mentioned system, offer a fair chance of recovery and should be undertaken in all cases, but if we wait until constipation, distention, high temperature (or a high temperature falling to normal with increased rapidity of pulse), secession of pain upon palpation, lividity of the abdominal walls, cold hands and feet, cold perspiration on the face and delirium, it is too late, for it is a sure indication of collapse. Operation is absolutely useless at this stage of the process. It brings discredit on surgery, it injures the surgeon's reputation, for they will almost invariably die if we attempt it, and it will

have its influence in the community, as being one more death from operation for appendicitis, as the layman does not differentiate cases as we do.

The above cases we will classify for convenience sake, as very acute, and include what is known as the fulminating varieties, and in this class of cases I wish to go on record as an extremist for early operation, in all cases, regardless of race, color, creed or nationality, under all conditions and circumstances.

By far the greater number of cases of appendicitis are not of the variety just mentioned; we will classify these as sub-acute, or chronic. This includes appendicitis with abscess, the catarrhal variety, the recurrent form, the relapsing variety and what is called appendicular colic, really not a pathological condition at all.

Appendicitis with abscess:—In this variety the walls of the appendix are slowly penetrated by bacteria, or a fœcal concretion slowly ulcerates through the layers of the appendix, allowing time by the irritative process for adhesions to form a wall. This shuts off the general abdominal cavity, and sets up a localized peritonitis; in this variety a hard induration can generally be felt, but not always, owing to the rigid contraction of the right rectus muscle; or depending on the location of the appendix, it may be deep down and not in communication with the abdominal wall at all, as frequently occurs when the appendix is retro-peritoneal or curled upward and backward under the head of the cœcum, so on percussion we really get a tympanitic note, leading many into error. It may be that the appendix is long, which in a few cases hangs down well into the pelvis, near the rectum or bladder, the abscess tends to point or at least can best be felt through the rectum or vagina. This precaution should never be neglected when examining a case. Or it may be that the pain will be felt in the lumbar region, in the neighborhood of the kidney, and so deep and far back that one would not suspect the appendix as being guilty of the disturbance. In such cases the attack may begin fairly acutely, with pain and tenderness and quite often nausea and vomiting; or it may commence gradually with only slight tenderness in the iliac region, and a general feeling of malaise.

The pain increases, vomiting sets in, and the second or third day the temperature may rise, occasionally a chill is experienced. The symptoms increase in severity or may remain stationary. The abscess extends, setting up multiple abscesses, bursts into the general peritoneal cavity setting up general peritonitis, opens into the intestines, bladder or rectum, or becomes encapsulated which may be followed by pyæmia, unless the pus is evacuated. This is the only right treatment.

In this variety, if seen early, the patient kept quiet, an ice bag applied constantly, no strong cathartics administered, pus can in perhaps one-half the cases be prevented from forming, but they are dangerous even in experienced hands and this variety of cases will almost surely have other attacks if they do recover; hence, the vast majority of this species require operation sooner or later, and take them as a whole the sooner the better, unless they do not come under observation until the inflammatory mass is in its transitional stage, when it is better to observe the case closely and wait a day or so for the pus to form, but this disease is so uncertain and erratic that it requires large experience and a trained sense of touch to determine just what stage it is passing through. This is the second most fatal variety.

Appendicitis is called recurrent when there is an interval of complete health between attacks; relapsing, when the symptoms do not wholly disappear, with now and then an acute exacerbation. They may be of any variety except the first. They vary in intensity and often there is a history of eight or ten attacks. A patient having one marked attack or two fairly mild attacks, is very sure to have others which may be serious, and treatment by rest and ice bag through the mild attack and operation between attacks under favorable circumstances is the safest procedure. The lesions found here are adhesions, thickening of the wall, small encapsulated abscesses and fœcal concretions in the appendix. Patients are obliged to so regulate their lives that they dare not go out of the reach of an abdominal surgeon, for fear of an acute attack which might carry them out of the world.

Lastly, catarrhal appendicitis, in which the mucous membrane of the organ is in a more or less chronic state of con-

gestion, rendering it readily susceptible to irritations and ulceration, evidenced by occasional attacks of pain, nausea and tenderness, with no tumor, which quickly subside under a mild purge and ice bag. The lesions found at operation when required are adhesions, stricture, or simply thickened mucous membrane.

The majority of patients with a history of two or three attacks of catarrhal appendicitis run less risk by having their diseased organ removed at a favorable time than they do by allowing it to remain, when a serious attack might occur where surgical aid could not be readily procured.

Appendicular colic is a term applied to the strong vermicular contractions of the muscular element of the appendix to eject a substance within its lumen and many a serious case has been allowed to progress until it assumes a serious aspect under the belief that it is simply appendicular colic.

To generalize and form a rule that is reasonably safe in the second classification, I would say, that after twenty-four hours of the onset of any case, in which by the hypodermic injections of one good dose of morphine and the application of an ice bag, the symptoms do not remain stationary or subside, but tend to grow worse until the pulse reaches 100, then is the time to at least bring the case under surgical observation. If this rule were followed very few cases would be allowed to go on until too late for cure.

I am aware that occasionally an appendix is removed unnecessarily, but the patient is happier, and the surgeon for his consolation has the satisfaction that his patient will not suffer from what, if I may be allowed to coin a homely word, might be called appendicifobia.

27 EAGLE STREET.

THE REPORT OF A FEW CASES OF OPERATIVE APPENDICITIS.*

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Among these cases, one is reported for the peculiar condition in which the appendix was found to be, and another

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because of the seat of operation, but all of them are especially intended to furnish an occasion for the further discussion of some of the most important and as yet the most debated points in the technique of appendicular operations, namely: the best material to be used in making sutures and ligatures; the safest way of disposing of the stump; the method of closing the abdominal wound which yields the most satisfactory results. In the course of this report, I shall endeavor to point out the divergence among operators of note, indeed, of fame, as to these different points.

Elizabeth N., a widow, aged 43, was submitted to an intermediate operation on June 21, 1898; Drs Peltier and Montmarquet kindly assisting me.

Patient had had three attacks of appendicitis; the first in January 1896, the second in August of the same year, the third on June 2, 1898, that is, about two years after the second attack, and twenty days before being operated.

The first attack had been a severe attack, and the question of an operation after recovery had been agitated; but the case improved so well that the patient was allowed to run her chances. The second attack was light, and passed away in a few days. The third resembled very much the first in intensity.

In each of the attacks the peritoneal cavity escaped being involved, and the patient being slim, with thin abdominal walls, the disease could be well defined and mapped out, and the progress of the case accurately watched.

A point to note in the last attack is this—that when the tumor was so reduced as to give merely the feeling of a resistant cord the size of the little finger, this cord would, each time it was even slightly manipulated, swell up to more than the proportion of the thumb.

The incision was made directly over the tumor, somewhat outside McBurney's point. The greater omentum was adherent by its free edge to the mass, to the extent of a couple of centimetres, it was carefully separated, and a ligature thrown around a bleeding point on this raw edge. The appendix was now found to originate in the posterior and external aspect of the cœcum and, following an ascending and internal direction, to describe a semi-circle, grafting itself

anteriorly, by its free end, on the cœcum, near the ileo-cœcal valve. Not only had it grafted itself there, but it was soon demonstrated that it had entered the intestine and opened a communication with it at that point. The peritoneum, much thickened (fully to the thickness of half a centimetre) appeared as continuous and as firmly adherent over the distal end as over the proximal end of the organ. It was incised in its whole length over the convex aspect of the appendix and stripped away on both sides. It now became easy to loosen the appendix from the point where it had re-entered the intestine, the tissues here showing much alteration and a tendency to break down. Once separated, and the intestinal gap secured, the appendix was lifted up, and dissected back to its origin, a ligature thrown around close to its insertion, the organ cut off, and the end cauterized with carbolic acid.* Turning back to the intestinal wound, the edges were inverted, and the wound closed by interrupted sutures—Lembert's stitch—interesting only the outer coat of the intestinal wall. The closure here might be compared to the one you would practice on a bullet hole of the intestine, and in some way it realized what would have been a Price-Fowler operation on the proximal end of the appendix. A few ligatures were now thrown over some bleeding points. The peritoneum which had been stripped back, and which now appeared in excess, was, however, carefully preserved, approximated, and reunited over the whole by a continuous suture from end to end, and in such a way as to leave no denuded surface exposed on the inside of the peritoneal cavity. Silk was used for all these sutures and ligatures, very fine silk. Finally, the abdominal incision was closed by one row of interrupted silk worm gut sutures.

On examining the removed appendix, a common silver probe could be run through it, it was not stenosed, and, when so stretched, the sheath exceeded the foil by one centimetre, giving the unusual length of thirteen centimetres. We were, at the time, particular in making a note of the fact, for we considered such a length in that organ as something extraordi-

*In reference to this cauterization of the stump with carbolic acid—and this applies as well to a similar treatment of the cervical mucosa in supra-cervical hysterectomy—while it must be conceded that the most advanced surgery of the day disproves emphatically such a practice, yet operators are still found, not at all antiquated, who assert that trouble just come to the cases in which they neglected this detail of technique.

nary, and undoubtedly due to its diseased condition. A diseased condition, however, is no longer for us a necessary factor in the existence of an extra long appendix, and an appendix thirteen centimetres long is no longer considered an extraordinary thing. Last winter (January the 4th), we had an occasion to see what an unusually long appendix is. While performing an autopsy in a case of intestinal hæmorrhage complicating typhoid fever, there came into view an appendix, the length of which carefully taken, measured exactly fourteen centimetres; this appendix originated in front of the *caput coli*, turned around it and ascended transversely along its posterior face; it was adherent in its whole length, and there was no reason to believe that it was not healthy.

But, to return to our case, it will be seen that we had a side-channel, permeable throughout, and communicating with the intestine at the distal as well as at the proximal end. Thus is the impression conveyed that substances might have traveled out from the intestine through that side-channel and into it again.

This patient made a rapid and uneventful recovery, the highest pulse-rate being 88, and the highest temperature 100° ; and this but once, on the fourth day. The bowels were moved after the first 24 hours by an enema of soap, glycerine and turpentine, and so, on every day thereafter, until the 16th day. At no time were purgatives administered through the stomach until the enemata were discontinued; a granule of podophyllin of 12 mgr. per day being then substituted.

A few days before that operation, on June 3rd, 1898, it was my privilege to have one of my patients—a young man of 21 years; Hugh T.—submitted to an intermediate operation at the hands of an expert abdominal surgeon. It was the young man's second attack since the winter. Both had been pretty sharp attacks. The appendix was rather small, but of a compact and tough tissue, and while it was free in the abdomen, it was completely bent upon itself—the bent-thermometer of Tiemann and Company gives an exact idea of what the appearance was—and hence probably arose the trouble. In this case, after careful dissection, and lifting the appendix well up, the operator divided the peritoneum as he would the skin in a circular amputation of the thigh, loosened

it, rolled it up as he would a shirtsleeve, ligated the appendix near its base, cut it off, cauterized the stump, and then brought down the sleeve, which, overriding the stump well, made to it an ample and complete jacket. Catgut was used through this procedure, to ligate the stump and to suture the peritoneum over it; bleeding vessels were secured in the same way; the surgeon also closed the abdominal wound with catgut—chromicized and otherwise—making in all five planes of sutures, some interrupted, some continuous. Being thus closed, the wound looked simply well, and it was, indeed, good fortune to have had an occasion to witness a work so excellent!

As you will notice—and without any attempt at drawing comparison, which would be unpardonable conceit on the part of the writer—the two operations offer some similarity, from this fact that, in both, the ligatures shutting off the appendix were applied on the appendix proper underneath the peritoneum, and that the peritoneum being brought over, served to protect the peritoneal cavity against the ligatures as well as against the stump itself.

Right here I am gratified to put the question:

Was the appendix disposed of in these two operations after a method realizing the greatest safety, and likely to be conducive to the best results?

I speak especially of what I have called, for want of a better expression, the “shirt-sleeve method” of bringing the peritoneum down over the ligated stump and suturing it well over it.

There is no doubt in my mind that it is a positive advance over the older method, in which the ligature is cast around the appendix and the organ removed by a square section. In this method, the peritoneum being included in the ligature, its blood supply is cut off, an occurrence of no little moment for its future vitality; the ligature is not buried under the peritoneum but exposed on its surface; and the peritoneum being severed on a level with the appendix does not permit as perfect a casing over the stump as when it is left in excess, as in the shirt-sleeve method.

But if it is an advance on this latter method, can it be considered a method called to hold its own in the presence of

the methods most advocated and most in vogue in recent times? for instance, the inversion-method of Edebohls, the modified inversion of Dawbarn, and the excision-method of Price.

In the first method, the entire appendix is supposed to be inverted; in the second, the procedure calls only for the inversion and burying of the stump after amputating the distal two-thirds.

Not to speak of the possibility of setting up a sharp inflammation in an appendix absolutely choked as a result of the inversion, and of this inflammation passing on to gangrene with its usual sequel of perforation and death from general peritonitis, I may repeat what I heard once said by a surgeon of a great deal of practical experience and—what is still better—of a great deal of practical sense: “It takes a very smart man to accomplish such a feat as the inversion of the appendix, in part or as a whole, especially of a *diseased* appendix.” And to this I may add: should such a feat be accomplished when dealing with an appendix such as the one I propose to speak of later on (and to exhibit to you), the feat would be nothing less than a phenomenon!

As to the excision method, as practiced by Price of Philadelphia for the last several years, and modified by Fowler, it really appears ideal in its simplicity. “After the surrounding parts are protected with gauze,” I here quote from a description of Dr. John Young Brown of St. Louis, “the cœcum is held between the thumb and index of the left hand; an assistant seizes the appendix with a forceps, and the operator with curved scissors cuts the entire organ out of the head of the cœcum; the wound in the cœcum is then closed with a double row of sutures; the dirty sinus is removed, and we get a perfect coaptation of healthy tissues.” This is, indeed, a simple description, and possibly an ideal procedure; but there is in this description just one word which involuntarily sets you thinking: “the dirty sinus.” It is true, you have a possibly dirty sinus, but you have not necessarily a dirty wound; you have, on the contrary, a wound which you may keep aseptic and at least free from intestinal dirt; in case you follow the Price’s open intestinal method, you are no longer sure of accomplishing that. Thus, should I consider

the method advisable only in cases of gangrene of the appendix where there would have been extension of the gangrenous process to the cœcal wall. In other cases, I would rather be less radical, and adhere to a method which certainly has safety in its favor. If one puts himself as the subject on trial, it comes to me that he would hesitate to have the Price's operation performed in his own case, unless it was strictly called for, and then that it would be at the hands of one very expert in that line of work.

If we now pass to the manner in which the abdomen is closed, and to the material used for sutures and ligatures, the similarity of procedure which I have gone so far as to try to establish between the two cases related, ends there—for, on these two points, the two operations have differed; the abdomen being closed in one by one row of sutures, and in the other by sutures *à étages*, silk being used in one, catgut in the other.

Without anticipating, and while I am free to admit that, to-day I would use catgut, when cumol-prepared, in preference to any other material, I will not think it amiss, for the sake of the expression of opinion we desire to obtain, to bring these two questions in the following way:

Is catgut a safer and more innocuous agent for buried and lost ligatures and for sutures in general than silk?

And—is the technique of sutures *à étages*, certainly more scientific, but assuredly more protracted, a safer guard against future ventral hernia than the more simple and more brief one plane of interrupted sutures going through and through?

I have done some researches about this, and have compiled some data.

Even the most skilled among operators seem to be at variance on these two points, and one has only to point out how great is the divergence between them to demonstrate the embarrassment and irresoluteness which confront the man whose surgical experience is limited and who operates but occasionally under the pressure of circumstances. Here, I speak only as one of many!

Thus, at an hospital where I have seen a great deal of brilliant work, some of the cases critical to the extreme, so far as I know, catgut is exclusively used, at least in the prac-

tice of one operator, and no exception is ever made to closing the abdominal wound with several planes of sutures.

At another hospital where, as in the hospital just spoken of, any amount and any variety of work is constantly being done, good substantial and difficult work, silk, as far as it has been my privilege to witness, was relied upon inside, and the abdomen closed with silk worm gut, usually silver dyed and run through and through.

I have seen, in Montreal, Gardner use twisted silk throughout.

Lapthorn Smith, also of Montreal, employs silk worm gut, and leaves it *one month* in place.

In Berlin, Martin, Olshausen, Dührssen use catgut, while Landau uses silk and silver wire.

In Leipsic, Zweifel uses catgut, Sanger, silk.

In Paris, Ségond uses silver wire, Bouilly crin de Florence, Pozzi catgut and crin de Florence. Ségond and Bouilly suture through and through, Pozzi makes three rows.

Pestalozza, in Italy, and Schmidt, assistant of Schauta, of Vienna, employ silk.

Pawlick, of Prague, uses catgut on stump and for inner planes, and silk for superficial sutures.

Jacobs, of Brussels, whose sutures are always *à étages*, uses crin de Florence throughout, for parietal buried as well as for superficial sutures.

Olshausen objects to sutures through and through with silk worm gut as he fears that, should pus form, they might be the means of its advent into the peritoneum; and Landau, who operates at no great distance from Olshausen, is most emphatic in disapproving the sutures *à étages*, because, in his opinion, should pus form, it will be there incarcerated, while, with sutures through and through, it will find an easier way out; cases of peritonitis had at his hands a fatal termination from no other cause.

While Olshausen uses catgut and is most particular in making several planes—as many as four in people with thick fat wall—and this on the ground that it guards better against hernia, he is still the first to admit that eventration will sometimes take place despite every and all methods of sutures.

As to the manner in which nature disposes of silk ligatures,

it is a question whether they can become absorbed; we know that they will get encysted. Pestalozza had occasion, last summer, to demonstrate this before a medical acquaintance of mine, who was present at his clinic. In removing a cervix, which he had left two years before, and which had afterwards become cancerous, he found some of the old ligatures encysted and calcified.

This encapsulation *in situ*, however, does not always take place; ligatures sometimes start on a journey, and surprisingly enough find their way into other organs. Thus, Kolliker, of Vienna, in exploring the bladder with his admirable cystoscope, has found them there and removed them.

Catgut, of course, will not be subject to such vagrancy, and is likely to be absorbed *in toto* and without entailing any local trouble or consecutive systemic disturbance, provided it is absolutely sterile—another point not always in one's power to exactly determine. So far as we know to-day, it is generally conceded that the sterilization of catgut in treating it by cumol is the best means of guarding against that kind of accident.

In my case, it was undoubtedly the opinion of the experienced surgeon, who operated, that, in using catgut thus treated, he was taking no chance for the working in of any morbid element, and this, I suppose, explains as well his preference in all his work of the catgut over the silk. The case, however, notwithstanding the careful, safe and admirable way in which the abdomen was dealt with and closed, had some temperature in the two weeks that followed the operation, and finally developed a lymphangitis of the leg opposite the seat of operation—showing after all the absorption of some septic material. Yet, it may be said in exoneration of catgut that, in this particular case, the infection may have come from some other source.

Save this accident, the patient recovered well, and although he was a young man with very thick fatty abdominal wall, I must state in support of the method by which the wound was closed that he is the carrier of a solid and well retentive cicatrix.

I cannot say as much of the patient I operated with sutures through and through. While she has never since had a day

of sickness as regards her bowels, showing that this part of the operation at least has stood well the test of time, and while until recently she gave the hope that the closing of her abdominal wall had equally been satisfactory, she has of late become aware of a little swelling and gurgling to which she has called my attention. Verily she has a small hernia, the size of a vest button hole. The day this patient will be ready to have this corrected, I feel confident that I will give her wound the benefit of several planes of sutures.

Less favored than the two preceding cases, the third case, that I now wish to submit to your kind attention, did not have the benefit of an intermediate operation.

Willie R., aged 12, was operated, on February 11, 1897, during the height of the suppurative stage; his family physician, Dr. Montmarquet, assisting, as also Dr. Gervais.

The boy was in the fourth week of his sickness; he had suffered intensely; he had had chills and great fluctuations of temperature; his general condition was anything but promising. Fortunately, the local trouble was well walled up on the side of the peritoneal cavity. It presented itself as a considerable mass, projecting forward, but especially extending around the side toward the lumbar region. There was much infiltration of the overlying tissues, unusually so around the side compared to forward. The most sensitive point under pressure was also in that direction. All this seemed to intimate that we were likely dealing with an appendicitis of the retro-cæcal variety. It also suggested that the focus of suppuration might be reached at least as safely and as easily from behind as from the usual McBurney's site. At the same time, it was thought that a postero-lateral operation would secure a much better drainage, an advantage of no small importance considering the miserable and dejected condition of the patient.

No doubt being entertained as to the presence of pus, an incision was accordingly made from the back around the side, above the crest of the ilium, somewhat as the incision would be in a colotomy on the descending colon, only a little more forward. Having cut through the integument and cellular tissue, the dissection had to be carried to a depth of from three to four centimetres through tissues much thickened and

hardened by inflammatory deposits, and finally pus was reached. This was of an intensely fetid nature. The opening was now enlarged more with the finger than with the cutting edge. After washing out the cavity, it was thought best to go no further in search of the appendix, and the wound was loosely packed with iodoform gauze. The third day, when the wound was undressed and irrigated, material that looked like broken down appendix was washed out as well as some fœcal matter. Again, at the next two dressings, some of the intestinal contents were discharged through the wound. Meanwhile the temperature had become normal, and the child was clamorous to eat. Henceforth, he steadily recovered, the wound closing in six weeks, and he is to this day well.

At the time, it was not thought that operating in that way presented any of the features of a regular technique; or one, which, under certain circumstances, could, with advantage, be substituted for the classical incision. Without any claim to original work, it was the nature and condition of the case which suggested to our mind this method of proceeding. Later on, however, it was satisfactory to ascertain that such a procedure had been given much thought. Dr. Grinda, of Nice, for instance, made it the subject of an essay before the XII International Medical Congress at Moscow, held that summer of 1897, and soon after, the *Union Médicale* gave a report of what he (Dr. Grinda) considered to be *The Indications and Advantages of the Lumbo-Iliac Incision in the Treatment of Suppurated Appendicitis*. It will be seen how directly our case led us to the same experience and conclusions.

"The incision," says Dr. Grinda, "should follow the external edge of the sacro-lumbar mass, incurvating itself at its inferior part in order to run on a parallel with the iliac crest, a finger-breadth above it, to about three centimetres from the antero-superior iliac process.

"Such an incision is indicated in all cases where there is good ground to believe that the suppurated appendix lies posteriorly to the cœcum. To establish this diagnosis, one should be guided especially by the existence of an acute pain in the region of the triangle of J. L. Petit, while McBurney's point is not or but little sensitive; by a particular sensation

of fullness and resistance of the right flank; by the sonorous resonance of the right iliac fossa.

"The lumbo-iliac incision might even be chosen in cases where the seat of the abscess is not defined; where there is no dullness, no diffuse puffiness and infiltration of the right iliac fossa. Should then the appendix be situated laterally or in front, instead of in rear, of the cœcum, it could yet be easily reached by carefully loosening the cœcum through the horizontal (iliac) part of the incision.

"The lumbo-iliac incision allows of the cœcum and appendix being reached by the most direct and sure way. It exposes less than the usual operation to the infection of the peritoneum, and it always avoids the dissection, oftentimes difficult and dangerous, of intestinal coils that may be interposed between the cœcum and the abdominal wall. It makes sure, by its very situation, of a perfect drainage. Finally, it guards against eventration."

On the 10th of September last (1898), we were given a most excellent occasion to study "the indications and advantages of the lumbo-iliac incision."

Henry W. G., 20 years old, a patient of Dr. Lyons of Lansingburgh, presented what may be called a typical "Grinda-case:" large mass in the right side, rendering the asymmetry of the abdomen conspicuous, greater fullness and resistance around the flank, pain and tenderness decidedly more marked in the region of the triangle of Petit than at McBurney's point. The young man had been sick ten days, with a constantly high temperature. With the assistance of his physician and of Dr. Montmarquet, we operated upon him the next day, following exactly the technique of Grinda. The incision liberated a large quantity of pus; this pus was of an excessively foul odor, and considerable gas escaped with it. Fear was, on that account, entertained of the cavity being in direct communication with the intestine. A careful exploration failed to settle that point and to locate the appendix anywhere in the cavity. The wound was closed after a piece of tubing and several strips of iodoform gauze had been placed in different directions for drainage. The following day, the temperature had fallen to normal, but the discharge from the wound had the same fetid odor; the wound was

irrigated and loosely packed with iodoform gauze only, the rubber tubing being omitted. The third day, all drainage was omitted, and henceforth the wound was allowed to drain itself. On the fourth day, a piece of slough was washed out while dressing, and the discharge, which until this time had kept very offensive, turned on the day after to a sweetish odor, and became scanty.

Beginning the second day after the operation, to test whether or not the wound communicated with the bowels, a solution of Iron and Potassium Tartrate was given to the patient, and kept up for fully ten days; the fœces thoroughly underwent the staining process, but the discharge from the wound remained unchanged in color.

On the eleventh day after the operation, there was a sudden rise in temperature, with acute pain at the upper limit of the liver; this rise lasted 24 hours and passed away without finding explanation either on the part of the liver, or the lung, or the pleural sac. As the wound had not entirely healed, it was cautiously probed, but no evidence could be had of pus being retained and accounting for either the pain or the temperature.

In four weeks from the date of operation, the patient was up, had regained flesh, and was feeling very well. Yet, there persisted a small sinus from which a thin odorless discharge would escape every day. The peroxyde solution failing to heal up this tract, nothing seemed left but to dissect it down. This dissection, however, was postponed from date to date on account of the case doing otherwise so well and of the patient not being over-anxious of again going on the operating table.

On the 30th of November, i. e., eleven weeks after the operation, a concretion, corresponding in size to No. 16 f. Otis' scale, and one centimetre long (and which is now exhibited) made its appearance at the opening of the tract. Four days after, the wound was closed.

Patient now presents a good firm retracted scar; one which should likely guard him against future eventration. Eventration in that particular region (of the triangle of Petit) is most unusual, yet it is known to have occurred. That it will not here, no attempt is made to draw such a conclusion, for the case is yet too recent.

The only conclusion suggested is, that it appears satisfactory to have, in the case, adopted the Grinda's technique.

I am not quite sure that the Grinda's technique would apply in as satisfactory a manner in cases where, instead of pus, you were likely to deal only with plastic exudates and well organized adhesions. The operative field could not be as free as per the abdominal way; nor could an appendix imbedded and well fastened behind the cœcum be reached as easily. Operating in that way in order to avoid the interposition of adherent intestinal coils would not compensate for the increased difficulty in technique. Finally, you could hardly depend on the guarantee of conducting your work altogether outside the peritoneal cavity, hoping thereby to guard this cavity against infection. I am afraid that your dissection would, in many cases, carry you into the peritoneal sac, before you knew it.

To this very point I was recently led to give much consideration. This was in relation with one of the cases of appendicitis, operated of late at the Cohoes Hospital.

It was a typical case of the retro-cœcal variety, in a maiden lady of 25 years of age, Lizzie W., who was suffering at the same time with a retroverted uterus, firmly retained by adhesions in its abnormal position.

The patient came on the table to undergo both operations at the one time.

It is my pleasure to present you the appendix removed on that occasion; the appendix spoken of, a moment ago, as a good test-case for the inversion-method. You notice its dumb-bell shape! That is about enough to say.

Although now considerably shrunk away by alcohol, it was much enlarged, thick, unyielding, and so adherent to the under surface of the cœcum as to appear as one of its longitudinal bands. It was separated with considerable difficulty, and at one point tore off slightly, so as to let out a drop of substance, fortunately more pathogenic in nature than purulent. How readily this occurrence gave to understand that, had the case been allowed to go on—on account of the mild evolution of the initial attack and the indefiniteness of the local symptoms just before operating—in no time it would have taken a new start and undoubtedly passed on to fierce

suppuration, terminating in one of those undesirable and unpromising cases surgery has however to deal with. As it was, this material did not seem to be endowed with any infectious properties, or if it was, careful wiping and cleansing saved the case from infection, for the patient had no temperature to speak of during the operative time, and not speaking of some retention of urine which occurred at the time she was almost well, she made a most gratifying recovery from her both ailments.

Needless to say that plain and chromicized catgut, cumol-baked, was used throughout, and that both abdominal wounds (median and lateral) were closed with sutures *à étages*.

56 CONGRESS STREET.

Clinical and Pathological Notes

SOME UNCOMMON RHINOLOGICAL CASES.

1. Infection following Removal of Adenoids. 2. Rhinolith. 3. A Position Adapted for the Removal of Adenoids under Anaesthesia.—I take pleasure in reporting the following uncommon cases:

John S., nine years old, referred to me by Dr. H., April 4, 1897. His mother told me that he had been troubled for several months past with loss of appetite, that he did not care to play with the other children, that tonics had been taken with little or no benefit, that he had had trouble with his knee which did not yield very readily to treatment; that he had been troubled for a long time with nasal catarrh and had been a mouth breather, and that he had had the ordinary children's diseases.

On examination I found a small exostosis on the left side of the septum. The naso-pharynx was filled with hypertrophied lymphatic tissue and both faucial tonsils were hypertrophied. I advised an operation to clear up matters with the assistance of Dr. H and Dr. D. I removed under strict aseptic precautions the exostosis, the adenoid and hypertrophied tonsils, ether being used as an anæsthetic. The little fellow recovered from the anæsthetic very nicely and was sent home in a carriage, well wrapped in a blanket. I advised his mother to keep him quiet in bed a couple of days

and that the family physician, Dr. H., should see him the next day, which he did and found him up about the house feeling fairly well but with an elevation of temperature, 101° F. He was put to bed. In a couple of days he complained of feeling badly and upon examination it was found by Dr. H. that he was suffering from pneumonia. In a few hours signs of basilar meningitis developed and the child died in a few days.

Since this sad experience I have learned of a similar case, which happened in the family of a physician, Dr. G. The child, who was quite young, I believe a girl some six or seven years old, was operated on by a New York specialist to remove an adenoid. The child developed meningitis from which it died in a few days.

In neither case was an autopsy possible, so that I am unable to say whether the meningitis was due to tuberculosis or to a septic infection. In both cases there seems to have been an indistinct history of tuberculosis. It is possible that the knee trouble in the first case was of a tuberculous nature in as much as it was rebellious to treatment. The father of the second child has had hip disease from which he now has considerable shortening. If the meningitis in both cases was due to tuberculosis, where did the infection come from? I have been unable to learn of anyone who has found tubercle bacilli in lymphatic tissue removed from the nasal pharynx although many have looked for them. I am aware that it has been intimated that these growths may be of a tuberculosis nature but thus far no one has conclusively proven it. It may be possible that a latent tubercular meningitis existed prior to the operation, not sufficiently developed to produce symptoms by pressure but far enough advanced to be aggravated by an operation of this kind. This I barely think possible. Would it not be more likely that both these cases died from septic meningitis? I presume the New York operator observed the rules of aseptic surgery, as did I, but it is almost, if not quite impossible to render these parts aseptic. We know that the nose is filled with streptococci as well as staphylococci, and that it would be a simple thing for them to gain entrance to the circulation and thereby cause a general septic condition. The first case developed pneumonia, probably a septic pneumonia, which was followed shortly after by a septic meningitis. In the

second case I am unable to say whether there were any other symptoms of septicæmia, as I am unable to get the history, but from the short duration of the illness I am led to believe that the meningitis was of septic origin, as in the first case.

The lesson taught me from these cases is that the operation is not free from danger; that it should not be performed by an inexperienced operator; that the strictest aseptic precautions should be observed, not only with the instruments but by rendering the parts as nearly aseptic before the operation as is possible; that adenectomy and tonsilotomy should not be done at the same time, as it leaves too broad a raw surface exposed for infection, but that they should be done separately; that the patient should be kept in bed, and the parts should be thoroughly cleansed with antiseptic solutions after the operation; that, if the patient be weak and puny, he be given good nourishing food and tonics before operating. I believe the last theory to be the correct one, still I am unable to say positively as a post mortem was not made in either case.

Mrs. William H., of Waterford, age 62, consulted me April 21, 1897, complaining of nasal trouble of some standing. She had had asthma off and on for some time and has been gradually growing deaf for a number of years until she now hears ordinary conversation with difficulty. She has had ordinary children's diseases. About twenty-five years ago, she first had trouble with her nose and was treated by Dr. L., who, after drilling, trephining, etc., failed to give any relief. Since that time she has been treated by numerous physicians for various diseases, with no relief.

Examination of the nose revealed complete occlusion of the nostril, it being filled with polypi; an adhesive band had formed across the nostril near the orifice, the result of frequent attempts to remove the polypi by cauterization. Nothing more was detected in the nose on this examination except a hypertrophic rhinitis of the opposite nostril, probably due to overwork. Examination of the naso-pharynx revealed a chronic catarrhal inflammation. There also existed a chronic granular pharyngitis. Examination of the ears revealed almost complete deafness in the right and a less degree of deafness in the left.

With the consent of the patient I proceeded to remove the adhesive bands and the polypi under cocaine. After removing a quantity of the polypi I was obliged to stop work on account of the hæmorrhage, and after packing the nostril with gauze, I sent the patient home with the request that she return in a few days.

In about three or four days she returned and upon examination I found some of the polypi remaining. They were removed under cocaine and after the hæmorrhage ceased, a probe was introduced into the right nostril and about half way back it came in contact with a foreign body, which appeared to be partly imbedded in a granulating mass. A large pair of forceps was introduced and the object grasped but it was so large it could not be removed, although it was delivered from the mass which partly covered it. A larger and stronger pair of forceps was now brought into play and a piece was broken off and delivered, after which the hæmorrhage became so brisk that it was necessary to stop working, and after packing, the patient was allowed to return home with directions to return in three days, which she did.

Again the nose was cocainized and another trial was made to crush the mass. This time I succeeded in breaking off the edges but the parts were so vascular and the hæmorrhage so profuse, I was obliged to again pack the nostril and allow her to return home. The next day she had a fit of gagging and felt something pass down her throat. It seemed very large and irregular and caused considerable pain and discomfort. On the morning that she was to return to my office she had another fit of gagging and brought down through the posterior nares another large piece, which she secured and brought to my office. On examining the nostril this time I found it completely free of the rhinolith but badly swollen and inflamed. She was given a mild alkaline wash and told to return again in a week, which she did, apparently very much relieved.

I saw the patient several weeks later and found that she had been completely relieved of her asthma and that her hearing had been restored. She was able to breathe through her nose and there was no odor to her breath; her life had been changed from a miserable existence to a happy contented one.

I believe the polypi to have been caused by the filthy discharge, which had been present for so many years. The second piece of rhinolith which I secured weighed 6.2 grammes, and I believe if the third piece could have been recovered the weight would have been brought up to nearly 10 grammes. The interesting part of this case is the fact of the rhinolith having remained in the nostril so many years, which was due no doubt to the mass being hidden from view by the polypi and the granulations. If a thorough examination had not been made by one familiar with the anatomy of the nose this rhinolith might have remained in the nostril until the patient had died of some other disease. I can find no nucleus in either piece and I am unable to state how the rhinolith started to form.

I wish to introduce a position which I have adopted for the removal of adenoids, especially in children where it is necessary to administer an anæsthetic.

In my hospital work I usually place the patient in a position with the head extending over the end of an operating table, which is dropped so as to be low enough to enable me to sit on an ordinary stool at the head of the operating table, my knees being most on a level with its top. In this position I am able to grasp the head of the patient between my knees thereby holding it firmly.

In operating in private houses the patient is placed in a position lying crosswise of the bed to be occupied after the operation. The head is allowed to extend over its side, and held between the operator's knees as above described. Of course the patient is undressed and ready for bed.

The instruments, which should be thoroughly sterilized, are placed on a table at the right side. If an artificial light is used as is customary, especially when operating in a hospital, the assistant holding the light, preferably an incandescent light, stands on the left side. I usually give the anæsthetic myself, which I can readily do in this position. I prefer to give ether where there is no contra-indication for doing so. After the patient is thoroughly anæsthetised the cone is handed over to an assistant who is kneeling on the left side of the patient. The assistant who looks after the light can also manage the anæsthetic, after the patient is thus anæsthe-

tized. Place a piece of absorbent cotton over the nose and cover the upper part of the face and head with towels. This allows the blood that runs out through the nose to be absorbed by the cotton which prevents it from running into the eyes and hair. Next place the mouth gag in position and try to cleanse the parts as much as possible. To prevent the patient from swallowing his tongue it is grasped by means of a pair of tongue forceps and withdrawn and held by an assistant. Now introduce the index finger of the left hand into the mouth and pass it into the naso-pharynx, sweeping it around for exploration, at the same time tearing down any adhesions around the Eustachian tubes. An adenoid forceps is grasped by the right hand and made to follow the left index finger into place. The blades are opened and made to grasp as much of the mass as possible, taking care that no other tissue is engaged. By means of a rotary motion the mass is removed. This procedure is repeated until as much of the growth is taken away as is possible with the forceps. Now make use of the curette and finally the finger nail, scraping away any shreds which might be left.

The patient is now drawn back on the table or bed, whichever is used, and the mouth and naso-pharynx cleansed of any blood clots. The gag is removed and the patient placed on his side so as to allow the blood to run out of the mouth and nose instead of down into the stomach. The cotton, towels, etc., are removed from the head and face, and the patient placed in bed where he should remain for several days, kept on a light diet. The throat and nose should be sprayed frequently with some saline solution to keep them as clean as possible.

The advantages this position has over the upright position is that there is less danger from the anæsthetic, and I believe that this point is worthy of consideration, judging from the numerous unpleasant experiences I have had. The blood will be confined mostly to the naso-pharynx and some will run out through the nose and be taken up by the cotton; there will be less coughing and gagging from the blood running down into the larynx and trachea. There will be less vomiting of blood when the patient has recovered from the anæs-

thetic. The field of operation will be clearer and the cavity of the naso-pharynx is by far easier of access. The operator requires less assistance and he can operate with more comfort.

This position is intended for children where an anæsthetic is required.

BURTON S. BOOTH,

Rhinologist and Laryngologist to the Troy
Hospital and Leonard Hospital.

21 FIRST STREET, TROY, N. Y.

Lymph-Adenitis of the Retro-Tracheal Glands, Simulating Aortic Aneurism.—The patient, C., aetat. 40, married, a letter-carrier, first came under my observation in December, 1896.

At that time he had a cough, spasmodic in character, which I took to be whooping-cough, as this disease prevailed in his family at the time. Expectorants were administered, and he was given pneumatic cabinet treatment. For a time he seemed to improve, but the cough was still troublesome, especially at night. He consulted Dr. C. E. Jones, who treated him for some time, and was then for several months under the care of Dr. Root, who placed him upon a course of local treatment for the throat. After an interval of some months, without any special treatment, he consulted Dr. Theisen, who diagnosed a paralysis of the left vocal cord, resulting from pressure upon the recurrent laryngeal nerve. He was relieved under treatment, for a time, but not receiving any permanent benefit, he stopped treatment for several months, but managed by sheer grit to keep at his work, not losing a day in all this time, and only giving up about two weeks before he died. He was examined several times by Dr. T. K. Perry and myself, and thorough investigation into the condition of his heart and lungs revealed nothing abnormal. A bacteriological examination of the sputum was negative. Upon my advice he again consulted Dr. Theisen in April, 1899, who found an increase in the severity of the symptoms and was fearful that a tracheotomy might be necessary for the relief of the dyspnœa. Conscious that he was in a serious condition the patient consulted Dr. Farlow of Boston, who, under date of April 28, 1899, wrote me as follows:

"Mr. C. consulted me with regard to doing a tracheotomy for his dyspnœa. I find some paralysis of the left vocal cord, but there is no swelling or occlusion of the glottis, and the dyspnœa is not of laryngeal origin. I have examined his chest, and Dr. Francis H. Williams and I have made an x-ray examination of his chest to-day. This showed us very marked signs of an aneurism of the ascending and also of the descending aorta. I have told him that he has a serious disease and that he ought to go back to Albany. I have prescribed Potass. Iodid., of which he is now taking xv grains three times a day. I told him I would like to write to you what we considered his case to be and that you would advise him as to what he ought to do. He seems to be in considerable distress, especially when he lies down. Dr. Williams seems to feel that there is no doubt about the diagnosis as shown by the x-ray, and I see no reason for considering the larynx as the cause of the trouble. I should be very much interested to hear from you about him, especially as to the progress of the disease."

Impressed by this communication the patient was again most carefully examined by Dr. Perry and myself, and later by Dr. Neuman, for the symptoms of aneurism. These we were unable to establish. The physical signs especially were wanting; there was no bruit, no tugging of the trachea, no aneurismal pulsation, impulse or visible tumor. The dyspnœa was of course suggestive, but is a symptom of too general significance to be of value in this delicate differentiation, and the same may be said of the slight degree of pulmonary emphysema which was noted in the later stages of the disease.

One week from the date of the last examination, May 10, 1899, the patient died of acute pulmonary œdema. A most complete autopsy was made by Dr. Lartigau, of the Bender Hygienic Laboratory, which was witnessed by Drs. Perry, Theisen, Root, Lewi, Neuman and MacFarlane. Through the kindness of Dr. Lartigau, I am able to present the following extract from the autopsy protocol:

NECROPSY.—Body 162 c.m. long, moderately well built and well nourished man. Rigor mortis absent in the upper and lower extremities. No apparent lymphatic enlargement. No

subcutaneous œdema. Pupils midwide and equal. Mucous membranes pale. Surface of the body generally pale. Livor mortis of the dependent parts. Body still warm. Subcutaneous fat is small in amount. The muscles of the thorax and abdomen fairly well developed and of a homogeneous deep reddish-brown color.

Larynx.—Practically free from congestion. Mucous membrane not thickened, nor does it show any evidence of other abnormality. Epiglottis apparently normal, as are also the true and false vocal chords.

Trachea.—Intensely congested throughout its extent and the mucous membrane moderately œdematous. It contains pin-head to split pea sized diffuse confluent areas of submucous hemorrhage.

Aorta.—Shows no apparent dilatation at any point. The circumference of the arch is 7 c.m. The circumference of the thoracic aorta is 5.5 c.m. The circumference of the abdominal aorta is 5 c.m. The intima is markedly irregular, the irregularity being due to variously sized areas of elevated fatty atheroma. Behind the trachea at a point on a level with the aortic arch and situated more to the left of the median line is a bunch of enlarged glands about the size of a small orange. The individual glands vary in size from a pea to those having a diameter of 3 c.m. They are firm in consistency and on section deeply pigmented in the central portions, less so in the peripheries, which are apparently congested. The central pigmented portions are black. Now and then on the sectioned gland small pin-point to pin-head sized, discrete hemorrhages are apparent. The individual glands are bound together by old firm bands of connective tissue. Subsequent minute dissection of these glands in their undisturbed anatomical relations to the aorta and trachea demonstrate the pneumogastric nerve of the left side and the left recurrent laryngeal implicated by the fibrous tissue uniting the different glands into the above mentioned mass. The pneumogastric nerve or its recurrent laryngeal show no apparent microscopic abnormalities.

ANATOMICAL DIAGNOSIS.—Retrotracheal lymphatic enlargement (?). Acute lobar pneumonia of the right lower lobe.

Œdema and congestion of both lungs. Emphysema of the left lung. Acute fibrinous pleuritis on the right side. Chronic adhesive pleuritis of the same side. Acute bronchitis. Swelling of the Malpighian bodies of the spleen. Fatty atheroma of the aorta. Cloudy swelling and fatty degeneration of the liver. Cloudy swelling of both kidneys. Congestion of the œsophagus, stomach and intestine. Acute tracheitis.

BACTERIOSCOPIC.—Two cover-slip preparations were made from the retrotracheal glands; one stained with aniline gentian-violet; the other with Loeffler's methylene blue. In neither cover-slip could any micro-organisms be detected.

BACTERIOLOGIC.—No anærobic cultures were made. *Æro*-bic cultures were made on agar and blood serum from the heart's blood, liver, lung, gall-bladder, spleen, kidney, and retrotracheal glands.

The cultures from the liver, gall-bladder and kidney remained sterile after six days' incubation in the thermostat at 37.5° C.

Culture from the blood of the heart, spleen, lung and retrotracheal glands contained pure growths of a non-motile medium sized round coccus which does not decolorize when treated with Gram's method. On media the organism grows as follows:

Potato.—A moist, invisible growth along the line of inoculation; no liquefaction of gelatin; slight acidification of litmus milk without coagulation; no turpidity of bouillon or Dunham; a moderate gray-white flocculent viscid deposit at the bottom of the tube of bouillon and Dunham; no indol in Dunham's peptone solution. On agar solution the organism grows as a moderately profuse, translucent, moist, gray-white film, scarcely raised above the surface of the medium. On blood serum the growth has a similar character to that on agar. In sugar media no gas formation.

The streptococcus pyogenes.

BACTERIOLOGIC DIAGNOSIS.—*Streptococcus pyogenes* septicæmia. *Streptococcus pyogenes* broncho-pneumonia; infection of the spleen and retro-tracheal glands with the streptococcus pyogenes.

MICROSCOPIC.—*Retro-Tracheal Lymph Glands*.—The periglandular connective tissue appears to be increased in amount and is infiltrated to a moderate extent with small round cells, the nuclei of which take the nuclear dye deeply. They have the morphological appearance of young connective tissue cells. Some polynuclear leucocytes may be made out among them. The infiltration, although universally present throughout the connective tissue, shows a disposition to occur in groups. The blood vessels of the connective tissue are dilated and filled with blood. The blood shows a tremendous increase in the number of leucocytes, the augmentation being of the polymorpho-nuclear type. The lymph nodes proper present strikingly excessive dilations of the lymph sinuses. The endothelial lining of the latter shows marked proliferation of the lining cells. Many of the endothelial cells lie within the sinuses and with a very great number of polynuclear leucocytes and a few small round cells closely pack these spaces. These changes in the sinuses are universal throughout the gland. The lymphoid elements of the gland proper appear to be increased in number and occasionally show slight infiltration with polynuclear leucocytes. No increase in the amount of connective tissue can be detected in the sections. A considerable but variable amount of brownish or yellowish-brown, opaque pigment can be made out in different sections from the nodes. Under the high power it is more or less finely granular and generally occurs in clumps within the lymphoid elements proper, and in no instance was it made out in the sinuses. The blood vessels are engorged with blood which shows marked leucocytosis similar to that observed in the blood vessels of the periglandular connective tissue. Now and then within the lymph spaces may be seen cells oval in form, with correspondingly oval nuclei, three or four times larger than a red blood corpuscle, containing small quantities of finely granular, yellowish-brown material. In some of the sections an increase in the fine connective tissue is observed, and in these sections the pigment seems to lie in the connective tissue. This increase is very marked in some sections. Changes similar to those described by Cœrtel are observed in several places; the periphery of such an area is filled up by closely aggregated small

round cells whose nuclei stain deeply with the nuclear dye, and the central portions are occupied by less closely aggregated and more scanty cells of an epithelioid type. Between them there lies a pink-staining material which is very finely granular.

Sections from the retro-tracheal glands and lung stained with Weigert's method were free from any micro-organisms.

Sections from the same tissues stained with Flexner's method showed occasional chains of streptococci.

This case seems worth reporting on account of the extraordinary pathological condition, the source and relations of which are, even after the autopsy, obscure. The patient had had a specific infection some twenty years before the invasion of the condition which terminated his life, but the anatomical structure of the enlarged glands does not point to syphilis as the cause. Aortic aneurism is often difficult of differentiation, especially when deep-seated growths result in pressure manifestations of identical character. This case shows that the diagnosis may be at times impossible, and that in the absence of the pathognomonic symptoms of aneurism a diagnosis by the x-rays is not justifiable. It would seem that the exclusion or the ignoring of other symptoms upon the evidence afforded by the x-rays is not warranted, and that the revelations of the skiagram must be accepted only as an aid to or as corroborative of the subjective symptoms and the physical signs of disease.

FREDERICK L. CLASSEN.

Correspondence

HALLE, 28 August, 1899.

Dear ANNALS:—It was with great regret that I left Würzburg after a stay of three weeks. The old town and the old hospital had become very attractive. The hospital at Würzburg is peculiarly fortunate in its endowment. The founder of the hospital, an old archbishop, especially cognizant of the weaknesses of mankind, gave to the hospital many of the vineyards which surround the city. As the wine of Würzburg is famous,

“ At Wurzburg on the Stein,
At Hocheim on the Main,
At Bacharach on the Rhine,
We find the best of wine,”

this property is estimated to be worth at least 10,000,000 marks (\$2,500,000) and the present income is greater than the actual needs of the hospital. In the basement of the hospital is a quaint old wine cellar where one can buy the hospital wines. Each patient receives a bountiful supply of wine. Erlangen is three hours ride from Würzburg and the university now boasts of more than a thousand students, about four hundred of whom study medicine. Prof. von Strümpell had just left on his vacation but his assistants were exceedingly kind in showing the interesting cases. Although the number of patients was small, almost each case was of the deepest interest. There were two cases of *tabes dorsalis* in women, two cases of pure spastic spinal paralysis, one of which was readily recognized as the original of the picture in Strümpell's text book, a case of Huntington's chorea, and a case of rheumatism with complete ankylosis of the vertebrae, so that at first sight he looked very much like a case of *paralysis agitans*. It was fine to look over the case histories of the cases of spastic paralysis—forty and more pages of foolscap finely written and almost entirely dictated by Strümpell himself. It showed the thoroughness with which each slight symptom was observed.

Nuremburg is only a short distance from Erlangen and so well known for its moat, walls, turrets, castle and everything savoring of the ancient that it seems incredible that this fifteenth century city should have the best and most modern hospital in Germany if not in the world. The hospital has accommodation for 600 patients and consists of thirty distinct buildings arranged in beautiful grounds with flowers and fountains. The buildings are either one or two stories in height, heated by hot water and hot air and lighted by electricity. The floors are handsomely tiled and nowhere is a corner to be seen. The operating building is in the centre and contains no rooms for patients as they are removed in hand carriages directly after the operation to their wards. Near by is the bath and “heil-gymnastik” building. Here are Russian, Turkish, sand, electrical and all kinds of douche baths

and in the same building a complete gymnasium with rooms for massage and electricity. This most magnificent structure cost 5,000,000 marks (\$1,250,000) and when the difference in the value of labor is considered it would cost us probably twice as much. The annual expense for maintenance is 800,000 marks. I saw the hospital very completely with the medical director who is also the designer of the hospital and put the question to him and also afterwards to the superintendent and the sister in charge of the operating room, what changes they would make if they had to construct the hospital again? They all replied that there might be some changes made in small things, but that they were perfectly satisfied after use for two years with the general plan; the heating, the conveyance of food and the transmission of patients to and from the operating building. Although the number of cases was large there were very few interesting cases.

A few days later when I reached Leipsic and visited the hospital, I recognized that this hospital was prototype for that in Nuremberg, but it lacked the conveniences which modern construction now furnishes. Prof. Romberg, the grandson of Romberg who discovered Romberg's symptom, gave me permission to make the visit with him for several days. He is the adjunct professor of medicine while Curschmann who has done so much work in asthma is the professor. The clinical material is simply enormous as there are eight hundred medical cases in the hospital. Among the great number of interesting cases was a case of tabes dorsalis with argyria, the result of the excessive administration of nitrate of silver; another case of tabes with marked muscular atrophy, also a patient with hereditary athetosis. I was struck by the fact that antipyrin was administered in rheumatism with the salicylates and when I asked Prof. Romberg about its effect on the heart, he replied that he had never seen any bad effect. There was here also a patient with ankylosis of the vertebra following rheumatism, but it was not so marked as in the patient at Erlangen. Leube had called my attention to the fact that the cervical articulations were frequently effected in rheumatism, a fact which was commonly overlooked in text books.

A. MACFARLANE.

Editorial

The Disposal of Garbage.

The report of the Committee on Garbage Disposal to the Albany Board of Health, presented by the Chairman, Dr. F. C. Curtis, on September 1, is a most exhaustive and valuable document. In 1897 it was recommended by the board that a utilization method of disposal be adopted, but the further investigations of the committee have shown this to be impracticable, and after full inspection and study, the reduction method has been found most successful, and the establishment of a crematory is urgently recommended.

In respect of the utilization method the committee states:

“Without detailing the experiences of the committee, which as our final report two years ago shows, adhered still to the anticipation of the ultimate success of the utilization method of garbage disposal, it need only be said that the subsequent history of these enterprises from which we hoped so much has almost entirely been one of failure. Of the two which we specially counted on, one has never done any practical work, and the other, having two large plants in operation, has had one of them suspended completely, and the other is now under prosecution as a nuisance. There are nowhere more than two or three in operation, all of the plants are located remotely from the city, and we know of not more than one or two cities that are considering them at all at the present time. Even if they were within the bounds of sanitary requirements we are confident that there would be no economy in their use, and that no company will now undertake to dispose of our garbage by a utilization process without asking a bonus which would probably exceed the present cost of disposal by other methods; the salvable matter in other words costs more than it is worth. If, for instance, a ton of garbage yields \$2.47, and the company operating the works requires a bonus in addition of 60 cents, when it costs to destroy the ton of garbage but 50 cents, there is no economy in utilization. We know of no system of utilization to-day which on the two main points, sanitation and economy, is to be recommended as worthy of use.

“During the last five years great improvements have been made in processes of incineration, and with a properly executed contract, a crematory should be in every way satisfactory and sanitary.

“To be sanitary it must give off no odors either in its immediate vicinity nor odors carried up its stack to fall eventually at a remote point. This is attainable, and a garbage destructor should be, and can be, so clean in its performance as to be as free from ill odors as a common factory, with nothing to suggest uses to which it is being put. To secure this, first, it must be so planned that every load of garbage is discharged at once, upon its arrival at the plant, into the furnace, without handling in any way. This handling of garbage prior to deposit in the destructor is one of the necessary evils of the utilization works; and so too with some cremators it is part of the process. Sometimes attempts at salvage are made by trimming the material brought and sorting out of it tin cans, rags, bottles, old shoes, rubber scrap, rejected clothing, paper, carpets, bedding, all of which is fit only for destruction and to reclaim which must soil the premises and create a store of unsanitary matters. Ashes, too, in some places are mixed with the garbage, and being incombustible the works are planned so as to screen them out; this necessitates exposure of the matter and exposure of soiled parts of the plant used for this sifting, and moreover with the screened ashes escape all the foul liquids as well as bits of garbage, rendering a product unfit for the uses to which clean ashes may be put. The mixing of ashes and garbage by the householder must be prohibited.

“No furnace should be considered in which handling the garbage in any way is a part of its process. Neither should it be allowed to drain the garbage of its free liquids. Common garbage consists of seventy-five per cent of moisture, and that which is pumped out of water-tight vaults is almost all liquid; all of this must go into the furnace to be evaporated. Next, the combustion must be perfect. The resultant ash must be free from combustible organic matter and free from moisture. There must also be such construction as to consume or convert all the gases that are liberated in the processes of burning. This is now perfectly attainable. And,

moreover, the draft must be such that no foul gases escape when openings to admit a load of garbage are made. All these must be retained and destroyed. As a minor point, petroleum, which has been used as a fuel, but is really not at the present time considered, should not be, for its fumes are at least disagreeable. Provision should be made for admitting the entire carcass of a large dead animal. The law provides for including the disposal of dead animals as a part of this work and the money expended by the city heretofore for most unsatisfactory doing of this will hereby be saved with much better result."

The committee recommends to the Common Council the Dixon crematory, and specifies the municipal legislation which should secure perfect results. In the details thus thoroughly worked out by the committee a great public service has been rendered, and it is hoped that the Common Council, for the comfort, health and æsthetics of the city, may promptly adopt the report.

Medical News

Edited by H. Judson Lipes, M. D.

UNION UNIVERSITY OPENING—Union College, at Schenectady, opens this fall with an increased attendance and with every promise of a prosperous year. Three new men take their places in the college faculty,—Lindsay Duncan comes from post graduate studies at Clark University to teach mathematics, surveying and drafting; Mr. John L. March, a graduate of Lafayette, with three years of post graduate work in foreign universities, becomes instructor in modern languages, and D. C. Bushnell, Ph. D., who has taken both his bachelor's and doctor's degree at Yale, will assist Prof. Ashmore in the department of Latin.

Work on the new Y. M. C. A. building will be begun as soon as the contracts can be let. The movement to improve south college dormitory is well under way and it is hoped that before the beginning of another college year the work will be completed.

DEATH OF PROFESSOR BALBIANI.—The *Tribune Médicale* for August 2nd announces the death of Professor Balbiani, the Embryologist of the College of France, at the age of seventy-seven.

DEATH OF DR. MAX THORNER.—The *New York Times* for August 28th announces that Dr. Max Thorner, of Cincinnati, was found dead in a bath room on the 27th inst. Dr. Thorner held the chair of laryngology in the Cincinnati

College of Medicine and Surgery. He was a fellow of the American Laryngological Association, of the American Laryngological, Rhinological and Otological Society, and also of the Berlin Laryngological Society.

CHANGES IN EUROPEAN FACULTIES.—The *Wiener klinische Wochenschrift* for August 10th made the following announcements: Dr. Carl Ipsen, extraordinary professor, had been made ordinary professor of Legal Medicine in Innsbruck; Dr. Lucal and Dr. Senator, extraordinary professors, have been made honorary ordinary professors in Berlin; Dr. Gumprecht has been made extraordinary professor of legal medicine in Jena; Dr. O. Block has been made an ordinary professor of surgery in Copenhagen; and Dr. Rossoni ordinary professor of medical pathology in Rome.

THE UNIVERSITY OF PENNSYLVANIA AND THE PENNSYLVANIA STATE MEDICAL EXAMINATION.—From the *New York Medical Journal* we learn that of one hundred and forty-three students from the University of Pennsylvania, examined by the State Board of Medical Examiners of Pennsylvania, only one failed, and that the general average of the whole number was 86%, an average decidedly in advance of that attained from any other school. The Women's College ranks next, the general average being 81 $\frac{1}{4}$ %.

HOSPITAL CORPS MEN NEEDED.—The work of providing hospital corps men and trained nurses for the enlarged Philippine army continues to give Surgeon-General Sternberg and his colleagues some concern. According to the calculations of the medical officer at the war department, it will be necessary to have an aggregate of 2,000 hospital corps men ready for service when the fall campaign opens. At present 1,000 more men are needed. Special efforts are being made to secure good men for this service, but the recruiting is progressing very slowly, owing to the desire to enlist in the volunteer infantry regiments.

ST LOUIS' NEW CITY HOSPITAL.—From the *Medical News* we learn that the new hospital at St. Louis for which ground has just been broken, will, when completed, cost several million dollars and will be perhaps the most complete and perfect institution of the kind in the world. The pavilion plan has been adopted and the buildings first to be put up are the central administration building and a few of the surrounding pavilions. It will be some years yet before all the buildings called for by the plans will be constructed. A clause in the city charter permits one per cent. of all the city revenue to be used for this purpose. This represents at present an annual allowance of \$225,000. The plans were drawn after a study of the best hospitals of Europe and America.

NATURAL BONE-SETTER AND A MIRACLE WORKER.—In Troy recently one of the best known and reputable physicians has been sued for malpractice. In April, 1897, a Mrs. Case fell down a stoop in Troy and injured her left leg. After treating the injury herself for a month she called in the defendant. The plaintiff claims that the surgeon told her she had a sprained ankle and treated her for such. The leg did not improve and in November the plaintiff was still obliged to use crutches. At this time she went to

Rochester and met a man whom the defense characterizes as a "natural bone-setter and miracle worker." He, it is claimed, discovered that Mrs. Case's only trouble was a dislocated hip. He reset the hip and the patient rapidly recovered. The defense says that the story of the dislocated hip is absurd and presents the testimony of several well known Troy surgeons to prove that the plaintiff had a sprained ankle.

THE MILITARY MEDICAL ARRANGEMENTS FOR THE PHILIPPINES.—According to the *Army and Navy Journal* for September 22nd, Surgeon-General Sternberg has directed Chief Surgeon Woodhull, at Manila, to begin immediate preparations for the enlargement of the medical department and hospital accommodations at Manila to conform to the increased army of sixty-three thousand men. As the time required for the construction of a large wooden hospital would be at least six months, it will be necessary to depend upon buildings already constructed, which may be obtained for the purpose, or upon tent hospitals. The quarter-master-general has been ordered to send to the Philippines five hundred hospital tents for use. The medical department will send two hundred and fifty members of the hospital corps on the *Missouri* and twenty female nurses on the *Relief*. Four experienced surgeons of volunteers with the rank of major, are now under orders for Manila, in addition to the commissioned medical officers belonging to the new volunteer regiments.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The twenty-fifth annual meeting of the Mississippi Valley Medical Association will be held at Chicago, Illinois, October 3-6, under the presidency of Dr. Duncan Eve, of Nashville, Tennessee. The first session on Tuesday will be occupied by the address of welcome, president's address and reports of other officers. Dr. J. A. Witherspoon, of Nashville, will deliver the address on medicine, his subject being "Typhoid Fever." The address on surgery will be read at the Thursday morning session by Dr. Lewis S. McMurty, of Louisville, Kentucky. There will be simultaneous medical and surgical sections. There will be a series of public clinics from September 25th to October 2nd and from October 7th to the 14th. These clinics, about 140 in number, will be held especially for the members and guests of the association. The rooms of the Chicago Medical Society have been designated as the headquarters.

This society was originally known as the Tri-State Medical Society of Indiana, Kentucky and Illinois. Recently the name was changed to that of the above. In point of numbers, this association is second to the American Medical Association. The meeting without doubt will be largely attended since the Autumn Festival in Chicago will prove a powerful attraction.

THE NEW YORK STATE MEDICAL ASSOCIATION.—This association will hold its sixteenth annual meeting on October 24th, 25th and 26th, in the building of the New York Academy of Medicine. Besides a large number of miscellaneous papers, there will be two important subjects considered. The following named papers are to be contributed to as discussion on

typhoid fever: *The Advance in Our Knowledge of Typhoid Fever*, by Dr. Herman N. Biggs, of New York; *The Bacteriology of Typhoid Fever*, by Dr. W. H. Park, of New York; *The Clinical Diagnosis of Typhoid Fever*, by Dr. William Osler, of Baltimore; *Statistics of Typhoid Fever at the Roosevelt Hospital For Ten Years*, by Dr. W. H. Thomson, of New York; *Typhoid Fever in the Massachusetts General Hospital During the Past Fifty Years*, by Dr. Reginald Fitz, of Boston; *Some Phases of Typhoid Fever as Seen in Bellevue Hospital*, by Dr. A. A. Smith, of New York; a paper (title not given) by Dr. E. G. Janeway, of New York; *Typhoid Fever in Children*, by Dr. Abraham Jacobi, of New York; *The Local (non-surgical) Treatment of the Intestinal Tract in Typhoid Fever*, by Dr. De Lancy Rochester, of Buffalo; *The Treatment of Perforation of the Bowel in Typhoid Fever*, by Dr. W. W. Keen, of Philadelphia; and *Eye Complications in Typhoid Fever*, by Dr. A. Hubbell, of Buffalo.

On the evening of the 24th, at eight o'clock, there will be a number of communications on Expert Testimony. The Hon. Willard Bartlett, Charlton T. Lewis, Esq., William R. Purrington, Esq. and Dr. Theron A. Wales have agreed to be present and take part.

On the evening of the 25th a reception will be given by the association at the New York Academy of Medicine, to Dr. W. W. Keen, of Philadelphia, president of the American Medical Association, Dr. William Osler, of Baltimore, and Dr. Reginald Fitz, of Boston.

THE LATE PROFESSOR BUNSEN.—The name of Professor Robert Wilhelm Eberhard von Bunsen, of Hidelberg University, who died on August 16th, was almost a household word with students of physics. Born in Göttingen, March 31st, 1811, he hardly belonged to the present generation of investigators, but he has been identified with such great discoveries in the past, and has given his name to utensils and apparatus of such wide use, that his name could not be forgotten, although, being nearly ninety years of age at his death, his active life as a scientific man has long been ended. Professor Bunsen graduated from the University of Göttingen, where his father was a professor, when nineteen years old and became a professor in the Polytechnic school at Cassel at twenty-two. His first year of independent work led to discoveries concerning arsenic which opened up long chapters of modern chemistry. In 1838 he was "extraordinary professor" at the University of Marburg and here he took up the study of the high furnace, inventing the appliance of the hot blast and developing his method of gas-analysis. In 1841 he began the study of electrolysis and the electric arc, and invented the Bunsen battery-cell, which was in use until the advent of the dynamo. His calorimeter was far in advance of any known and he invented other instruments for the investigation of that phenomenon. The laboratories to-day are full of his contrivances and every shop knows the Bunsen burner, while it is also an indispensable part of the Welsbach gas burner. In 1852 he became professor in the University of Heidelberg where he stayed to the end of his days. His greatest work was the invention and development of the spectroscope. Medicine has lost in Bunsen one who has made very important, practical contribu-

tions to the century's advances in medical matters. He received the honorary degree of M. D. in 1875.

PERSONAL.—Major Lewis Balch, formerly health officer of Albany and also formerly Professor of Hygiene and Medical Jurisprudence in the Albany Medical College, recently spent a few days leave of absence in Albany. Dr. Balch left this city last December for Cuba, where he was assigned to duty in the third brigade, stationed in the departments of Santa Clara and Mantanzas. Recently he was ordered to report to the commander of the department of the west at San Francisco. Surgeon-Major Balch was looking the picture of health and has evidently been enjoying his work in Cuba. It is not known as yet whether he will be assigned to a station in the Philippines or not, but highly probable.

—DRS. HERMAN BENDELL AND EZRA A. BARTLETT have been appointed pension examiners to succeed Drs. J. V. Hennessy and Charles E. Davis.

MARRIED: BRISTOL—WOOLEY—At Albany, N. Y., September 18th, Dr. William S. Bristol (A. M. C. '95) and Miss Cora Benton Wooley, both of this city.

JOHNSON—FENWICK—At Schenectady, N. Y., August 20th, Dr. Garrett Vander Veer Johnson (A. M. C. '96) and Miss Mary Jane Fenwick, both of Schenectady. Dr. Johnson served in the hospital corps of the First New York Volunteers during the recent service. Dr. and Mrs. Johnson will reside at Schenectady.

WANSBORO—STEPHENS—At Albany, N. Y., Dr. William J. Wansboro (A. M. C. '95) and Miss Laura Stevens, both of Albany. After the wedding tour Dr. and Mrs. Wansboro will reside at No. 113 Lark street, Albany.

Book Reviews

Eighteenth Annual Report of the State Board of Health of New York.

Being for the year 1897. Transmitted to the Legislature February 15, 1898.

The Board submits a synopsis of its work throughout the State in the way of special and general investigations, inauguration and control of sewage disposal systems, sanitary control of water supplies; also the complete mortality reports of the State for the year.

Some space is given to a new departure of the Board in the examination from time to time of all the antitoxin serums offered for sale within the State. The purpose of this examination is to have all antitoxin serums sold within the State of uniform strength and free from toxic properties.

The report of the tuberculosis committee on "The Suppression of Tuberculosis" shows systematic and vigorous work in this field in the face of many obstacles and with but little assistance from the State in the way of the appropriation of funds. The committee expresses satisfaction with its

endeavors to educate owners of herds to the point of realizing the necessity of weeding out infected cattle and of keeping their herds free from tuberculosis.

One has but to compare this report with those of previous years of this or other States to note the marked advance in preventive medicine and sanitary science.

H. S. P.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Fiscal Year 1898, (Centennial Year), Being the Twenty-Seventh Annual Report of the Service and the One Hundredth Year of its Existence. Published by the Treasury Department, Washington, D. C., 1899.

This volume is one of the most valuable contributions issued this year in the interest of public health. It is not only an index of the contagious and infectious diseases existing in the United States during the period which the report covers, but contains many scientific contributions of national interest and importance. It is made up of announcements, circular letters, instructions and rules issued by the Supervising Surgeon-General; reports of the meetings of various National Public Health Associations by representatives of the service; exhaustive reports of 144 fatal cases, with necropsies, many of which are of great value in the literature of pathology; articles contributed by surgeons in the service; statistical reports; reports of epidemics and isolated cases of contagious diseases, as yellow fever, small-pox, plague, cholera and leprosy, and reports of the national quarantine stations; legislation and papers touching the relations of state and local health authorities and reports of the foreign and domestic sanitary inspection service.

The report contains one section, the value of which cannot be overestimated; it consists of a series of articles on yellow fever; its nature, diagnosis, treatment and prophylaxis, and quarantine regulations relating thereto. These papers were published and transmitted in book form to quarantine and health officers. A partial list of the papers will give an idea of the thoroughness with which the subject is handled and of the value of the subject matter to the health officer of a threatened or afflicted municipality: Discovery of First Cases Enables Suppression of Epidemics; Diagnosis of Yellow Fever, by Dr. John Guiteras; Treatment of Yellow Fever; Hygiene of Persons Living Within an Area of Yellow Fever Infection (two papers); Hygienic Measures to be Adopted by Persons Living Within an Area of Yellow Fever Infection; Measures to be Taken in a District Threatened by Yellow Fever (three papers); Regulation of Traffic to, from and through Yellow Fever Infected Towns; Communication with an Infected Town; A Précis of Detention Camp Management; Train Inspection Service (two papers); On the Value of the Autopsic Findings in Cases that Have Died of Yellow Fever. The section contains other papers of equal importance and comprises 177 pages of the report and should be read and studied by every health officer in the United States.

H. S. P.

Transactions of the Medical Society of the State of New York for the year 1899. (Ninety-Third Annual Session of the Society.) Published by the Society. 1899.

These reports, issued annually by the Society, aside from the up to date scientific papers which they contain, are always of great interest and value to all the members of the various County Societies, as they contain the proceedings of the meetings of the representative body of physicians of the State. They contain also a yearly list of the officers and members of that Society and the delegates from the several County Societies and the officers and members of each County Society.

The last meeting, of which this is a full report of the transactions, was one of the most successful in the history of the Society. Papers were read by Dr. William Osler, Dr. A. Jacobi, Dr. George M. Edebohls, Dr. H. J. Boldt, Dr. Carlos F. MacDonald, Dr. B. Farquhar Curtis, Dr. A. M. Phelps, Dr. Roswell Park, Dr. Herman Knapp, Dr. Ernest Wende and others. There were in all forty-three papers including the Anniversary Address of the President, Dr. John O. Roe.

The Society has a limited number of copies of the transactions, which can be had by forwarding the nominal price (\$1.00) to the Secretary, Dr. F. C. Curtis, Albany, N. Y.

H. S. P.

An Epitome of the History of Medicine, by ROSWELL PARK, A. M., M. D., Professor of Surgery in the Medical Department of the University of Buffalo. Second Edition. The F. A. Davis Company, Philadelphia, New York and Chicago. 1899.

The fact that a second edition of this little work has been called for in so short a time, is a pleasing evidence that a greater interest is being taken in the historical aspect of medicine. It is an unfortunate fact, that hitherto little interest has been taken in this side of our profession in the United States, the history of American medicine being almost entirely confined to the works of Thatcher, Williams, and Gross, and a few scattered pamphlets.

The importance of the subject to the student is probably appreciated by all who look back on their own student days, and remember the long list of anatomical structures, and diseases associated with names, which at that time were names and nothing more. We all of us learned what Poupart's ligament was, but how many of us knew anything about Poupart? We all knew of Bright's disease, but how many knew of Bright? It is needless to multiply such instances. It can readily be imagined that if short biographies had been associated with each of these names, the matter would have not only been more interesting but also more instructive; for what, after all, could be more interesting or instructive to the beginner in any profession than the history of the men who have succeeded in it?

Dr. Park's book, as its title indicates, is merely an epitome, and like all epitomes labors under the disadvantage of great condensation; when we consider that it covers the ground from a period of nearly 1800 years

before Christ to a period over 1800 years after we need not be surprised at this condensation. The task of classifying the different medical eras comprised within this time, and of laying sufficient stress upon the masters of medicine without laying too much upon the lesser lights, is a difficult one. We feel that the author has done well in following the classification of Renouard which is convenient as well as logical. In the selection of individuals for especial notice Dr. Park tends not unnaturally towards the surgeons, at times at the expense of the physicians, we think. An example of this is the failure to notice the group of clinicians and pathologists who made Guy's Hospital so famous at the beginning of this century, and amongst whom Bright and Addison stand out in prominence. Such men as Gull, Harley and Budd are also surely worthy of mention. In the chapter on anæsthesia we should think that the work of Esdaile on hypnosis as an anæsthetic might have been noted.

Taken as a whole the book is as satisfactory as such an epitome could be, and we hope it will prove to be the forerunner of more pretentious volumes on the subject. The illustrations are well executed and a distinct addition to the work.

G. B.

Aide-Mémoire de Dermatologie et de Syphiligraphie, par le Professeur PAUL LEFERT. Librairie J. B. Baillière et fils. Paris. 3 fr.

This little book of 288 16mo. pages is a condensed sketch of the subject of dermatology, intended as a manual for physicians and students. It is one of a large number of "aids to memory" issued by the publishers on medical topics, of which it is the most recent. Its purpose is principally for diagnosis, though some attention is given to treatment. The classification adopted by the author is one of the simplest, being fundamentally etiological, and dividing diseases of the skin into two classes: 1. Those due to the action of an agent operating from the exterior, and 2, those due to internal causes. It is interesting to note the arrangement which follows, which has in it much that is suggestive. Not a few little handbooks like this from our native authors are at hand, but this one will be found novel and interesting.

C.

A Text-Book of Obstetrics. By BARTON COOKE HIRST, M. D., Professor of Obstetrics in the University of Pennsylvania. Handsome octave volume of over 800 pages, 630 illustrations. W. B. Saunders, Philadelphia.

One of the best and by far the most practical work on obstetrics which it has been our pleasure to review is that by Professor Hirst. Judging from the many illustrations of cases seen in the author's private practice and by the elaborate bibliography, it is apparent that the work has been in preparation for some time.

The chapter on anatomy is not so full as the obstetrician might require, but for practical purposes it is sufficient. The same fault might be found with the chapter on symphysiotomy. The author is evidently greatly opposed to the "deep multiple incision" of Dührssen in rapid delivery in

eclampsia, and we heartily agree with him. He also believes that whenever the Cæsarian section is indicated, the Porro operation should be preferred. The chapter on purperal sepsis is most excellent and if carefully studied and followed out in practice much good would result.

One good feature of the book lies in the fact that many questions which are still *sub judice* are carefully sifted out, leaving only those facts which are now considered warranted in the light of our present knowledge of the subject. A better book could not be placed in the hands of students.

H. J. L.

Manual of the Diseases of Children. By JOHN MADISON TAYLOR, A. M., M. D., Professor of Diseases of Children, Philadelphia Polyclinic; and WILLIAM H. WELLS, M. D., Adjunct Professor of Obstetrics and Diseases of Infancy, Philadelphia Polyclinic, et cetera. Illustrated. Pages, 743. P. Blakiston's Son & Co., Philadelphia.

It is often a question whether manuals are proper books to place in the hands of students. But when the subject matter is well written by men of experience, the manual may be most valuable since only the more essential and practical points are considered while much that is uninteresting and what is still *sub judice* is omitted. The subjects of the curriculum are so numerous now-a-days that it is impossible for students to read profitably the larger text-books and hence manuals are sometimes needed.

The authors of this excellent manual have been aided by well-known specialists in the preparation of certain chapters. The whole book is full of valuable suggestions, the chapter on infant feeding being unusually good. The illustrations are well selected, while the work of the publisher is as usual excellent.

H. J. L.

Current Medical Literature

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

The Stigmata of Syphilis in Children.—DAWBARN, in a paper before the New York Academy of Medicine, March 3, 1899, gives the following stigmata of syphilis: "The old-man appearance," the sallow look to the skin, an extremely thick umbilical cord which was unusually long and slow to separate, the syphilitic pemphigus in the form of large bullæ or blebs which was almost always fatal, the vesicular form not quite so fatal but indicating a severe type of the affection, the erythema, which was the common eruption, appearing usually in the lower part of the abdomen about three weeks after birth and called by some authors "syphilitic penny pieces." In only about twenty-five per cent. of the cases of inherited syphilis was any eruption observed. Condylomata at the orifices of the body were seen early. Snuffles was common and the mucous patches, ulcerations and gummata in the larynx were the cause of the characteristic crying and speaking.

A general stomatitis when mucous patches were absent was important and at times there was a peculiar desquamation of the tongue. General enlargement of the lymph glands was absent in congenital syphilis in contrast to the acquired form.

Hæmorrhages from sound or ulcerated mucous membranes and pneumonia accompanying or developed soon after birth, the "white pneumonia" of Virchow, pointed usually to syphilis. The spleen was almost always involved and syphilitic hepatitis was at times observed.

Then the Hutchinson triad, the notched teeth, the ground glass cornea and otitis media. A rapidly occurring alopecia, also a paralysis appearing suddenly and quietly are suspicious signs, while a rarer condition is a painless orchitis. The earliest and most common sign was osteochondritis of the shafts and epiphyses of the long bones; at times this is the only sign and is usually found at birth or in the first month; the swellings are usually sharply limited and tender on pressure. The syphilitic periostitis comes later, especially the bosses about the fontanelle. The finger nails have sometimes peculiar forms of onychia, especially the claw form. The temporary teeth were cut very early, of bad color and liable to quick decay. There was thus good reason for the popular opinion that it was bad luck for children to have teeth at birth. Hutchinson's teeth were observed only in the permanent teeth in those who had had sore mouth at any early age. The notching of the lower edge, the peg and screwdriver shapes were common. In late cases irregularities, hypertrophies and asymmetries of bony development were seen. The deformities of the nose were characteristic, also the changes in the tibia.

Lifting of the Uterus to Control Post-Partum Hemorrhage.—DICKINSON, in the *Brooklyn Medical Journal*, March, 1899, recommends a new method of treatment for this condition. Cases where it is difficult to induce firm and persistent contraction of the empty uterus after delivery and where the hæmorrhage is not due to laceration or retention of clots are suitable for this method. Any degree of firmness may be difficult to secure, as after long anæsthesia there may be intermissions in the contractions with bleeding. The ergot may not have had time to act, the hot water douche may produce only a temporary cessation and the hæmorrhage may be hardly sufficient to warrant tamponning the uterine cavity. The tampon is our efficient last resort, but should be used reluctantly in dirty surroundings as in tenement-houses. The method is: To pull up the uterus by seizing the fundus through the abdominal walls, the right hand is arched, the ulnar border resting against the symphysis while the finger tips and thumb encircle the narrow and relaxed lower uterine portion and neck. The lower manipulates the parts it compasses while the other hand grasps the fundus and makes active friction and compression of the uterus above, for which the promontory and all the lumbar spine afford a surface for counter-pressure. The control of the whole organ is complete and at intervals the upper uterine segment should be crowded down into the pelvis and then lifted again. This movement squeezes out of the relaxed and baggy vagina any clots that may form there. This method is not

available when good contraction exists, for the round ligaments hold down the uterus, but in such conditions it is not necessary. Sensitive women may resist this manipulation.

The following is the procedure advocated:

MILD CASES.

1. Manipulation of uplifted uterus.
2. Ergot hypodermatically.
3. Hot intra-uterine douche (120°).

SEVERE CASES.

1. Vigorous manipulation of lifted uterus.
2. Hand in uterus, cavity cleaning and bimanual manipulation.
3. Hot douche.
4. Tampon.

Pyocyaneus Infection in Sucklings.—ESCHERISCH, in the *Cent. f. Bakt.*, Bd. 25, No. 4, reports a number of cases of pyocyaneus infection in suckling children. Case 1. Child of four weeks of age; had a thigh abscess followed by broncho-pneumonia, which ended fatally; no fever; pyocyaneus isolated from abscess and broncho-pneumonic area.

Case 2. Child with poliomyelitis taken with diarrhœa and fever; fatal termination; autopsy showed acute gastro-enteritis; streptococcus and pyocyaneus in stools; streptococcus only in blood.

Case 3. Child with slight diarrhœa was suddenly taken with severe and copious diarrhœa, with pallor, vomiting, meteorism, etc.; albumen and casts in the urine; fatal issue; autopsy showed acute catarrh of small intestine, œdema of meninges and general pyocyaneus infection.

There was no serum reaction in two cases (1 and 2), where it was tested. Escherisch thinks that infection was conveyed from one child to another as all attacked occupied neighboring beds in the same ward. He thinks the infection was conveyed by the nurses and perhaps partly by the air. Since the ward was thoroughly disinfected no more cases have appeared.

Follicular Tonsilitis in the New Born.—J. EROSS, in *Wiener med. Presse*, 1898, No. 8, reports having seen twenty-two cases of this affection. The diagnosis was made accidentally. On account of the slight anatomical changes the symptoms were comparatively mild. There was no respiratory difficulty. Fever in eleven cases, the highest temperature ranging from 38° to 39° C. There were no ulcerative processes, nor much inflammation of the pharyngeal mucous membrane. Small white points about the size of a pin head were noticed on the tonsils and these later became yellowish. There was no membrane formation and the exudate, as a rule, disappeared in two or three days. The disease was most common between the third and fifth days.

Malignant Tumors of the Breast.—HUNTER MCGUIRE in the *Virginia Medical Semi-Monthly*, Jan. 27th and Feb. 10th, 1899, cites as the great cause of breast tumors in women 'the hyperæmia attending lactation, menstruation and parturition.' The mammary gland is attacked in the male in 1 per cent of the cases; the higher the civilization the greater number of

cancers; of those attacked in order of frequency come the Germans, Irish and native Americans, the American Indian being singularly exempt; most common between 40 and 50, one case having occurred in reporter's practice in a married woman of 19. Regarding the location, McGuire says: "If two lines, one vertical and one horizontal, are drawn through the nipple, they will divide the breast into four segments. It will be found that cancer forms more frequently in the upper and outer segment than in the lower part, and least of all in frequency in the segment next to the sternum."

The pain which may or may not have attracted the patient's attention to the growth is characteristic after the disease has progressed some months. There is a constant heavy aching pain in the breast; she will tell you that she feels as if a hot needle or knife had been thrust at short intervals through the part, the pain during these paroxysms being sharp, burning, stabbing or lancinating. Systemic infection and metastases may occur by the cancer material being taken up by the lymphatics, escaping arrest by the lymphatic glands, finding its way into the thoracic duct or some large vein—as the left subclavian—thus gaining access to the general circulation.

Secondary to cancer of the breast, involvement of the bones occur in order of frequency as follows: cranials, bodies of vertebræ, femur and humerus; medullary portion usually affected.

The prognosis is bad in the young, as the disease is more rapid and malignant. Pregnancy hastens the development. We read: "When it happens in a woman under 35 years of age it is, in my opinion, doubtful whether any operation, however radical, will lengthen life or lessen suffering." The two theories as to the essential nature of cancers are the embryonic or evolutionary, and the second attributing the disease to a micro-organism, both having many advocates.

W. J. W.

Indications for Chloroform During Labor.—In the *Northwestern Lancet*, March 15, 1899, BACON calls attention to the increase in the total volume of blood in the pregnant woman and writes that the increase is observed in the watery elements, in the white corpuscles and in the amount of fibrin, there being a corresponding deficiency in albumen and in the proportion of the red blood corpuscles. This increase in volume explains the cardiac hypertrophy, the latter lessening the liability of death from chloroform inhalation. Chloroform lessens the oxygen carrying power of the blood, lessens muscular irritability and weakens muscular action. It is contraindicated in emphysema, in syncope and when there is dilatation of the heart. In the first stage it should not be used as uterine inertia may result, necessitating the application of the forceps. The amount administered as labor reaches its climax should be carefully considered as the tolerance is very great at this time. There may follow as a result of a too indiscreet administration, hæmorrhage, depression of circulation, venous engorgement and cerebral anæmia. It is well to give ergot after chloroform anæsthesia. Chloroform acts well in valvular lesions of the heart, especially when the heart action is labored and irregular; when there is

disease of blood vessels, thus lessening danger of rupture; in albuminuria, with and without eclampsia, its action being to diminish amount of albumin; in certain cases of delayed labor it hastens delivery; in abnormally intense pains in hysterical women; during the second stage of labor; during application of forceps, and during version.

W. J. W.

DERMATOLOGY

Edited by F. C. Curtis, M. D.

Generalized Scleroderma.—LEREDDE and THOMAS, in the September number of the *Archives de Médecine Expérimentale*, publish an account of a case of generalized scleroderma, and carefully review the current theories on the pathology of this disease. The case occurred in a man of forty years of age with an old syphilitic history, who had had the disease for eight years before death. It began with an isolated patch of thickening over the crest of one ilium, but at the time of death had pretty well involved the whole surface of the body. At the autopsy practically no naked eye lesions could be made out but those of the skin, and a congestion and œdema of the lungs which had apparently been the immediate cause of death. The histological lesions in the skin consisted in great flattening of the epithelial layer and the formation of a large quantity of dense fibrous tissue in the corium. No sebaceous glands were to be found. The blood vessels of the skin, which were greatly decreased in number, were the seat of marked changes, especially in the sclerotic portion of the skin; here all the vessels showed an obliterating endarteritis, and around many of the vessels were signs of a chronic inflammation in the form of collections of round cells. The tongue showed changes similar to those seen in the skin. The vessels of the body generally were the seat of sclerotic changes. The nervous system was practically normal. There was a slight increase in the fibrous tissue in the liver, kidneys and heart muscle, and the thyroid and voluntary muscles showed similar changes.

In discussing the theories regarding the origin of this disease, the authors state that it has always been regarded as a nervous disease, although no definite series of nervous changes has ever been found to be associated with it. They further state that the skin lesions have generally been regarded as being secondary to the vascular changes which again are supposed to be due to the primary nervous change. The authors consider that there is not sufficient evidence to show that the skin lesions are due to the vascular changes, and further some cases occur without marked vascular changes. The supposed nervous origin of the disease is based upon the fact that in some localized cases of scleroderma the lesion occurs in the track of some nerve, or over the area of distribution of some spinal segment; but, as the authors point out, there are forms of skin disease which have a peculiar nerve distribution and which are still not due to nervous derangement. The existence of other nervous diseases with scleroderma (tabes, etc.) is so uncommon that it

is probably only a coincidence. Basedow's disease with scleroderma has often been noticed, and has given rise to the theory that scleroderma is due to changes in thyroid. Finally some authors have claimed that the disease can arise secondary to changes in the vessels due to constant irritation of the nervous system. In concluding the authors state that they think that all theories should be based on the pathological findings. There is nothing in these findings, they think, to definitely implicate the nervous system. They are inclined to think that the sclerotic change is primary and specific, and not dependent on the vascular changes. They suggest as a cause for the sclerosis an auto-intoxication or an infection of some sort, and point out the relatively frequent occurrence of scleroderma after infectious diseases.

Points in the Arsenical Caustic Treatment of Cutaneous Cancers.—By WILLIAM S. GOTTHEIL. 1. The arsenious acid caustic treatment of skin cancers does not contemplate or depend upon the actual destruction of the new growth by the caustic.

2. The method is based upon the fact that newly formed tissue of all kinds has less resisting power than the normal structure when exposed to an irritation and its consequent inflammation. Hence the former breaks down under an "insult" which the latter successfully resists.

3. If, therefore, the whole affected area can be subjected to the influence of an irritant of just sufficient strength to cause a reactive inflammation intense enough to destroy the vitality of the new cells, the older normal cells will survive.

4. Arsenious acid of properly mitigated strength is such an agent, and its application causes an inflammation of the required intensity.

5. It therefore exercises a selective influence upon the tissues to which it is applied, and causes the death of the cancer cells in localities outside the apparent limits of the new growth, where there is as yet no evidence of disease.

6. It is superior, in suitable cases, to any method, knife or cautery, which requires the exercise of the surgeon's judgment as to the extent to which it is to be carried. That that judgment is often wrong, and necessarily so, is shown by the frequency of recurrence under these methods even in the best hands.

7. It is applicable to all cutaneous carcinomata in which the deeper structures are not involved, and which do not extend far on to the mucous membranes.

8. It is easy of application; it is safe; it is only moderately painful; and its results compare favorably with those obtained with other methods.
—*Author's Abstract.*

The Treatment of Lupus Erythematosus.—HEBRA (*Wiener Med. Wochenschr.*, No. 1, 1899) treats lupus erythematosus by the external application of alcohol. Absorbent cotton is moistened with alcohol, and without exerting much pressure against the skin, the alcohol is gently applied to the diseased part. After the diseased area is touched with the cotton

a number of times, the cotton is removed and when the alcohol left on the skin has evaporated the same procedure is carried out again. The more frequently this is done, the quicker a result is obtained. The good effect of the treatment is undoubtedly due to the hygroscopic action of the alcohol, and the direct application of cold. The blood vessels contract, the diseased surface becomes paler and the œdema which is particularly present in acute fresh cases disappears. In order to increase this anti-phlogistic action, the author applies the following prescription: Equal parts of alcohol, sulphuric ether and spirits of peppermint. In one case, that of a young woman, with lupus erythematosus of the nose and cheeks, the disease was cured after alcohol had been applied several weeks, and there has been no recurrence in nearly a year. In four other cases of the chronic type, the same good results were obtained. The author warns against the use of soap, because it interferes with the good effects of the treatment. The most astonishing result of the treatment was in the acute case; here the disease had spread over the entire face, and while in the hospital, before the treatment had been applied, the exanthema had spread slowly over neck and the upper part of the thorax. The alcohol applications were applied ten times every day, and in four weeks not a trace of the exanthema could be seen. Six months afterwards the patient was again seen by the author, and not a single suspicious spot was detected.

PATHOLOGY

Edited by George Blumer, M. D.

Researches on Tuberculous Pneumonia.—JULES AUCLAIR (*Archives de Médecine Experimentale*, Vol. XI, No. 3, 1899,) conducted a series of experiments to prove that the pneumonia which accompanies tuberculous processes in the lung was not due to secondary infection. Reasoning from the known fact that in the exudate of such pneumonias tubercle bacilli are often not found he used in his experiments the tuberculous toxine, etherine. This he injected in varying doses into the trachea of guinea pigs and rabbits, and removed and examined the lungs at varying intervals. He found that all stages of tuberculous pneumonia from the earliest form of exudate to complete caseation could be produced in this way, and hence concludes that the pneumonia which accompanies tuberculosis is due to the toxins of the tubercle bacilli and not to secondary invasion by other organisms.

The Regeneration of the Mucous Membrane in the Bladder.—CORNIL and CARNOT (*Archives de Médecine Experimentale*, Vol. XI, No. 3, 1899,) have recently studied the regenerating power of the mucous membrane of the bladder. The experiments were made either by simply cutting open the bladder and reuniting the cut surfaces or else by making an opening in the upper part of the organ and filling it in with omentum. It was found that both the epithelial and connective tissue coats of the mucosa regenerated rapidly. In the cases where omentum was used to cover the

bladder opening the surface looking toward the bladder cavity soon became covered with a lining of bladder epithelium.

Free Body in the Peritoneal Cavity.—W. RINDFLEISCH reports in *Virchow's Archiv.*, Bd. 155, Hft. 2, 1899, a case in which he found at an autopsy on an old woman who died of heart disease, a hard body the size of a goose egg, free in the peritoneal cavity. There was also present a hydro-nephritic condition of the right kidney with atrophy of the organ, and an interstitial myoma of the uterus. Rindfleisch discusses the origin of these bodies and states that they are most frequently fatty degenerated appendices epiploicæ, but may be free lithopedians, or may be ovarian tumors or uterine myomata, whose pedicles have become twisted and which have gotten free. The free myomata are the rarest. Chemical and microscopical examination of his case showed the tumor to be degenerated and the outer portions to be infiltrated with lime salts. He could make out the structure of a fibro-myoma in the inner portions. He thinks that this was originally attached so that it pressed on the right ureter and that the condition of the right kidney was due to this pressure.

Total Transverse Rupture of the Aorta.—KOLSTER in *Virchow's Archiv.*, Bd. 155, Hft. 2, 1899, reports a case of this rare condition. The patient, a man of 53, entered the hospital with nephritis and heart hypertrophy. He was well one evening and found dead in bed in the night. At the autopsy the pericardial sac contained more than a liter of blood. The tissues at the hila of the lung were swollen and infiltrated with blood. On opening the aorta, which showed marked atheroma, there was found a short distance above the valves a complete circular rupture of the media and intima, the two sides of the rupture being fully one c.m. from each other and brought together only with difficulty. The adventitia was stripped from the other coats for a distance of nine c.m. up and down, and opposite the rupture of the media and intima was a transverse rupture of the adventitia five c.m. in length. The case was of great interest in that the rupture occurred while the patient was quiet in bed. Microscopic examination showed extreme fatty degeneration of the aortic wall.

The Function of the Giant Cells of the Bone Marrow.—FOA, in a recent number of the *Archives Italiennes de Biologie*, comments on the supposed functions of the giant cells which are normally found in the bone marrow (megakaryocytes). He states that they have been supposed at various times to perform various functions, and those attributed to them have been the formation of red blood cells, the formation of white blood cells, and, finally, a phagocytic action. From his studies he is inclined to think that the last view is the correct one, and he mentions experiments which go to confirm this theory.

He found that in rabbits with inanition, in various infections, in extensive burns, and in suppurative processes, large numbers of these giant cells took up polynuclear leucocytes. In some forms of infection, as in subdural infection with the staphylococcus aureus, he found many of the megakaryocytes in the capillaries of the lungs acting as emboli. He

states that some writers have already observed the inclusion of the leucocytes by the megakaryocytes, and have explained it on the ground that the giant cells had died and that the leucocytes had then wandered into them. He states, however, that the staining reactions of the leucocytes indicate that they, rather than the megakaryocytes, are dead, and he thinks that the function of the giant cells is to take up and destroy the leucocytes when the function of these has been performed.

The Transmission of the Tubercle Bacillus Through the Placenta.—AUCHÉ and CHAMBRELENT review the literature of this subject and report a new case in the *Archives de Médecine Experimentale*, Vol. IX, No. 4, 1899. They come to the following conclusions:

1. The number of satisfactorily proved cases of transmission of the tubercle bacillus from the mother to the foetus is very limited, since we have been able to bring together but twenty, including our own.
2. This transmission is more to be feared when the tuberculous lesions in the mother come on very rapidly and are widely generalized.
3. Such transmission has never been observed before the end of the fifth month of pregnancy.
4. In all the cases in which it has been examined the placenta has been found tuberculous, both microscopically and from inoculation experiments. It seems, therefore, that it is the first seat of infection, and that the bacilli colonize in it before invading the blood.
5. The foetal tissues can be infected with the tubercle bacillus without presenting any specific lesion either to the naked eye or microscopically.
6. When tuberculous lesions exist in the foetus they are usually found in all, or nearly all, the organs; rarely they are sharply localized.
7. Except in the case of Schmorl and Kockel, where the infection was localized in the adrenals, there have generally been large, even enormous numbers of tubercle bacilli in the neighborhood of the lesions.
8. The foetal tissues are not, therefore, a poor soil for the tubercle bacillus, and Baumgarten's hypothesis of latent tuberculosis, based upon an opposite view, is disproved by this evidence.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

Two Diseases Related to Retinitis Pigmentosa.—In the issue of the *Archives of Ophthalmology for September*, 1898, Professor FUCHS, of Vienna, has an article on two diseases related to retinitis pigmentosa, one of them being the already generally known retinitis punctata albescens, and the other, of which very few cases are yet reported, to which he now, in this article, for the first, gives the name of atrophía gyrata chorioideæ et retinæ. The author says that the disease known as retinitis pigmentosa is an insidious atrophy of the retina, whose source is to be sought less in the retina itself than in the chorioid which nourishes the retina. He cites the recent experiments of Wagenmann in support of the validity of this assumption. The pigmentation, which is the most

frequent and striking ophthalmoscopic sign, plays, really, but a secondary part. The characteristic features of this chronic atrophy of the retina are:

1. The hereditary nature of the disease and its occurrence in families.
2. Its commencement in childhood or youth.
3. Its slow but uninterrupted progress.
4. The first subjective symptom, night-blindness.
5. The most important ophthalmoscopic sign, atrophy of the retina, which is recognized by the thinning of the retinal blood-vessels and consecutive atrophy of the optic nerve.

The ophthalmoscopic picture shown by diseases of this class is not always the same. The author speaks of the atypical cases as being relatively frequent, some of them having the ophthalmoscopic appearance of retino-chorioiditis. He says that retinitis punctata albescens is a member of this class; that not all cases, that have been called by this name, really merit it. In the future it would be suitable to confine the use of this name to such cases as have, besides the white points which have too often determined the application of the name, certain clinical features in common. Such features are the existence of the disease in childhood, and generally in several members of the same family; consanguinity of parents; diminution of direct vision and marked concentric narrowing of the field of vision, and, finally, night-blindness, existing since childhood. The author cites six cases, reported by as many authors, to which number he adds one observed by himself.

The patient is a twelve-year-old boy, otherwise healthy, whose parents are related by blood, his mother being his father's aunt before their marriage. He is the only member of the family that has disease of the eyes, and has not been able, since the age of six, to find his way about alone in the evening.

Central vision is normal, but there is marked concentric narrowing of the field. The patient's hair is black, irides brown. Eyes normal externally; media transparent, each fundus normal, except for the white points. As yet, papilla and retinal vessels show no change. The fundus is sown with white points, of which the smallest are hardly visible, the largest having about the diameter of a retinal vessel of the second order. They are all pure white, sharply limited, and without pigment at their margins. They are most numerous around the papilla and around the macula. By the macula there is an area of two papilla diameters which is entirely free from spots, as is also the periphery of the fundus.

The author has seen only four cases of the disease to which he now gives the name, *atrophia gyrata chorioidæ et retinæ*. Three of the cases were those of sisters, whose parents were first cousins. They became night-blind in early youth, and are already partly blind. The fourth case is reported in the present paper. The patient was a man, twenty-nine years old, who was night-blind in childhood, and whose vision by daylight has recently diminished. The fields of vision are very narrow, extending but a few degrees. The papilla is like that in retinitis pigmentosa; the retinal vessels so narrow as to be almost invisible. Papilla surrounded by a zone of normally colored fundus, everywhere remarkably narrow.

At the macula an island of normal fundus about the size of the papilla. About this lies the atrophic area in which a few chorioidal vessels, on the white ground of the sclera, are visible. Within this zone are a few small islands of normal appearance, which are joined to each other by long, narrow bridges. These appear very dark by contrast with their surroundings, and, in places, almost black. The position and form of these islands, and the bridges which unite them, show plainly the nature of their occurrence; they are the last remains of normal fundus left between the atrophic areas.

A case which surely belonged to this class was reported by Jacobson in 1888. From this case, and from the four that the author has seen, the following clinical picture may be drawn:

The disease is apt to occur in several members of the same family, either handed down or in the same generation, and at times in children whose parents are related by blood. It begins in childhood with night-blindness. The ophthalmoscope shows signs of atrophy of the papilla, retina and chorioid. The papilla has the same appearance as in retinitis pigmentosa, and the atrophy of the retina is shown by the narrowing of its vessels. *The characteristic feature of the disease lies in the peculiar form of chorioidal atrophy.* The edge of the girdle which lies toward the papilla is scalloped, because the separate, rounded parts, of which it is composed, extend backwards varying distances, while the remains of the normal fundus project forward between them in sharp processes. This lobulated edge of the white zone is sharp, and in places is brought into greater relief by a narrow pigment margin. The longer the disease lasts the nearer this zone approaches the papilla, thus narrowing more and more the area of normal fundus, until finally only a slender ring remains around the papilla; in addition to this, an island of normal fundus, somewhat larger, may be preserved in the region of the macula.

Atrophia gyrata chorioidæ et retinæ is differentiated from retinitis pigmentosa by the prominence of the chorioidal atrophy, which dominates the ophthalmoscopic picture.

It is possible that these groups of capillaries may have a part to play in this disease. In any case, this disease seems to demonstrate that chronic degeneration of the retina in general, with the different forms of which the author has just dealt, is preceded by a primary disease of the chorioid.

Continuous Sterilization of Knives and Other Cutting Instruments.—In the fourth number of the volume for 1898 of Knapp's *Archives of Ophthalmology*, Dr. LIPPINCOTT, of Pittsburg, Pa., publishes an article entitled as above. The author had been led by the occurrence of panophthalmitis, following a smooth cataract-extraction, to make investigation as to the best method of sterilizing cutting instruments. A temperature, approaching the boiling point, continued for a length of time, impairs the cutting qualities of edged tools. The author's experiments show that complete sterilization is not secured by holding an infected knife in a boiling, alkaline solution for twenty seconds. While

boiling for fifteen minutes is the best means of disinfecting non-edged instruments, we must resort to other means of obtaining asepsis in the case of cutting instruments. A satisfactory method of sterilizing the last named must meet two requirements: (1) Freedom from injury to instruments and (2) effectiveness. With reference to the first of these requirements, knives, with handles of several different materials, were exposed to various antiseptic agents; alcohol was found to be harmless for exposures of less than 24 hours. Prolonged exposure caused rusting.

Formaldehyd gas emitted by formol in a closed vessel was harmless for exposure of two hours. When this exposure lasted 24 hours, small, whitish spots appeared on the blades; they could be rubbed off, but left the surface slightly rough. An exposure of 48 hours caused decided roughening of the blade. Formaldehyd gas from burning pastilles of formalin in Schering's sterilizer had no injurious effect when the exposure lasted but 24 hours. The blades of knives exposed three days in this way showed numerous, destructive rust-spots. A moderately strong formal solution turns a polished blade black in two hours and destroys its cutting qualities. The addition of three per cent of borax to the same solution entirely prevented its corrosive action on the blade.

In order to test the effectiveness of various sterilizing agents, culture tests were made. Knives were infected with pus from different sources, and, after drying, exposed to the above-mentioned germicides, then stabs made quickly in tubes containing nutrient gelatin. The article tabulates the results of 16 series of experiments with eight kinds of germicides; the only ones to give clear tubes were 5 per cent formol, combined with 3 per cent borax, and 20 per cent formol with the same adjuvant; the 10 per cent formol with 3 per cent borax did not sterilize as did the solutions of half and twice the strength of formol. From these experiments Dr. Lippincott concludes: 1. Alcohol is ineffectual for sterilization. 2. Brief exposures of infected instruments to formaldehyd gas cannot be trusted. 3. Exposure for 24 hours to formaldehyd gas, derived from pastilles, retards but does not prevent growth. 4. Exposure for 24 hours to formaldehyd gas emitted by formol is effectual. 5. Weak solutions of formal cannot be trusted, a 10 per cent one failing in some cases. 6. Exposure for 24 hours to the action of a 20 per cent solution of formol containing 3 per cent of borax may be trusted to kill germs. The author was operating, at the time of writing this article, with knives that had been kept continuously in such a solution for three months. Their cutting qualities left nothing to be desired. The fluid, unless unnecessarily exposed, retains its potency for months. In 17 of the 75 tubes used to show the germicidal power of the solution (and in which the result was favorable, without exception), the solution was three months old. The author suggests that it might be well to add a small quantity of formol to a solution, every three months, of which addition a record could be readily kept on paper stuck on the jar. German silver handles remain practically unchanged. Instruments taken from such a solution, for operation, should first be washed in sterile water, or a weak borax solution.

ALBANY MEDICAL ANNALS

Original Communications

THE ETIOLOGY AND PATHOLOGY OF TUBERCULOSIS.*

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Those of us physicians who commenced the study of medicine many years ago remember well the great difficulty of understanding and learning the extremely complex pathology of phthisis pulmonalis. Each text-book differed somewhat from every other in its description of the pathological changes that might be present in the lungs, and there were so many different anatomical lesions described, each being considered separately, that the real connection between these distinct morbid changes was often imperfectly understood; so that, instead of having a clear understanding of the disease as an entity, there was created in the minds of most students simply a confused mass of isolated details, which he despairingly failed to attempt to group in their true relation, one to the other.

After the tubercle bacillus was discovered, and subsequently when its relation to consumption had been conclusively proved, the pathology of this complex disease became wonderfully simplified, so that now without difficulty, we are able to understand and trace out the gradual steps from the earliest and simplest changes in the tissues, to the most complex and profound anatomical lesions.

* Read before the Albany County Medical Society, February 22, 1899.

The exposition of these changes will comprise a portion of this paper this evening. But before proceeding to this part of the subject it will be interesting to consider how and why this actual exciting cause of the disease, the tubercle bacillus, gets into the system and is able to destroy the life of its host. For, it is well known that every one is constantly exposed to this germ, and many experiments have been made, which have demonstrated that living consumption germs are present in the air of our houses, are lodged on the walls of rooms, on carpets and furniture, on the floors of street cars, and even in churches and theatres; and that it requires but a motion of the dust broom of the maid, or the feet of the occupants, to send these infinitesimally small dry particles whirling through the air, and down into our bronchi in the ordinary processes of respiration.

As all persons are exposed to this germ and but few contract the disease, it is evident that other factors besides the actual living germs which lodge in our bodies must be present, before we are forced to succumb to the ravages of this fatal malady; and these other factors may be discussed under the heads of etiology, and the normal resistance of tissues to bacterial invasion.

We will discuss the second of these topics first. While our knowledge of the physiological actions of the various tissues and fluids of the body is as yet very incomplete, yet we do know of two processes that nature employs in its endeavour to ward off the attacks of our minute unseen enemies.

One of these is the process which we call by the name phagocytosis. In the human body, and, in fact, in all living matter, a struggle for existence is constantly going on between the cells of the organism and the microbes which invade it. In the last few years this warfare between animal cells and germs has been attentively studied and much importance has been paid to it, and it is to this struggle between the white cells or leucocytes, or phagocytes, as these particular white cells are called, of the human body on the one side, and the pathological micro-organisms on the other, that we apply the term, phagocytosis.

It has been known for a long time that micro-organisms in their growth and development absorb nutriment, split it up and excrete the changed products, just in the same way as the human species assimilates food and excretes urine, fæces, and other excrementitious matter. The materials that germs excrete may

be of two varieties, those that are sometimes of advantage to them, and those on the contrary that in sufficient quantities may destroy the lives of the germs themselves. We also know from numerous experiments that micro-organisms have a hard struggle to overcome healthy living organisms, but that they attack and destroy dead material with ease. If any of these microbes then, excrete a poison which will have the power of weakening and killing any living cells in their neighborhood, the germs themselves may thrive upon the cells thus destroyed, and in this way their own excretion benefits them both by destroying their enemies and in bringing them food.

While we are unable to observe this process of phagocytosis under the microscope in human beings, yet we can readily watch the fight in certain small creatures in the animal kingdom, and are even able to interfere and help either the animal or germ at will, and the knowledge so gained we apply by analogy to our own bodies.

There is a little creature called the daphne or water flea, whose tissues are perfectly transparent, and which we can watch in the living condition under the microscope. The daphne is attacked by a rod-shaped germ which is taken into the intestines along with the food. This germ can be seen to penetrate through the intestine into the body cavity of the daphne. But almost as soon as one end of the rod has passed through the intestinal wall it is attacked by leucocytes; one or more surround the germ, and soon we see that the outline of the rod, instead of being straight and smooth, is gradually becoming eroded and is finally broken up and absorbed by the leucocytes. Thus in the healthy daphne the phagocytes are too powerful for the germs, which are promptly destroyed. If, however, you starve the daphne or rapidly change the temperature of the water, so as to weaken or stupify it, the leucocytes soon become sluggish and are unable to cope with the rods, which then germinate in the body-cavity of the flea, produce spores or conidia, which rapidly become too numerous or powerful for the leucocytes. These latter gradually become motionless, disintegrate, and become like empty bladders, and are destroyed; and then the defenders of the organism being disposed of, the rods further increase and the daphne is killed.

In this warfare between the cells and germs, it is important

to note that the phagocytes have to come in actual contact with the germs to destroy them, but that the germs, on the contrary, are able to poison the cells by excreting something that kills the leucocytes, even at some little distance off.

The other kind of protective power that living beings possess is probably a chemical one. This process can, perhaps, easiest be explained by reference to an experiment.

There are many snakes which are not poisonous, but there are certain others whose saliva acquires a tremendously toxic power, and this poison is dependent upon the presence in the saliva or poison gland of certain albumoses, which are elaborated in the body, and are not in any way dependent on micro-organisms. We know that the chemistry of albumoses and peptones is exceedingly difficult and complex, and that there are very many kinds of these bodies about which at present we know almost nothing. The splitting up of an albumose in the salivary glands of a snake is analogous to the splitting of an albumose in the intestine of a man; and we know that there is given back into the body of the snake by this splitting process, something that will be the complement of the albumose, and which, if united to it, would make the albumose innocuous.

The process of the splitting up of an albumose into two or more parts can be understood by a simple experiment. Suppose we have a thick iron rod and from it we split off a large, sharp splinter. It is obvious that this sharp portion might prove a very dangerous weapon, while the rest of the rod, having no sharp angles, would be comparatively harmless. If now the splinter be replaced accurately in the part of the rod from which it was removed, there are no longer any sharp points, and the two joined pieces are again harmless. The splitting up of an albumose is analogous to the splintering of the rod.

In the splitting up of an albumose you might get a substance that was dangerous like the splinter, and there might be formed other compounds that would be harmless. In the digestion of an albumose in a poisonous snake two compounds are formed, one called venom, which is found in the poison sack and which is dangerous, and the other called antivenin, which is harmless and also beneficial, as it is antidotal to the venom, which circulates in its blood. Now if you inject a considerable quantity of venom into an animal, it is promptly poisoned and dies,

but if you inoculate a quantity too small to kill it, it sickens and then recovers. After this you can inject larger quantities of venom, an amount which if given at first would have killed the animal, and it does not die, and by gradually increasing the dose of venom you can finally give at one dose enough to kill fifty unprotected animals, without destroying the one on which you are experimenting. On examining the blood of this animal it is found to contain antivenom, which neutralizes the venom when it is injected and renders it innocuous. The serum from this immune animal can now be injected into a second animal and he also will be protected against the venom.

This process is a chemical and not a physiological one, for, if you mix venom and antivenom in a test tube, they neutralize each other, and when the compound is injected it is innocuous and the animal does not suffer. The reaction seems to be similar to that produced by mixing an alkali and an acid together. The terms venom and antivenom are limited in this application to substances derived from snakes. The terms toxin and antitoxin are applied to the products of poisonous micro-organisms.

In a similar way, though as yet to a limited extent, by using the poison of certain bacteria, we are able to produce immunity in animals, and then to utilize this serum when needed to neutralize the poison of bacterial disease in the human species.

These, then, are nature's methods of combating the poisonous germs and their products, and now let us consider the factors that may be present in the human system that aid in the growth and development of the germs, and which enable them in the end to conquer us.

Let me begin again by an illustration: "If you inoculate a fowl with anthrax, it does not become ill, but if you stand that fowl with its feet in water and chill it down, it will succumb to anthrax readily enough."

This illustration is but a single example of a large number of varied experiments which show the effect of lowered vitality in decreasing the resistance of the body to disease germs; and indicates in a general way the kind of etiological factors which we might expect to be instrumental in allowing the disease to develop in human beings when the proper germs are present.

Almost as far back as medical history goes, consumption has been considered to be an hereditary disease. Heredity then is

the first etiological factor which will be considered. We know now that the actual poison of consumption is not transmitted to the foetus in utero, yet we recognize an inherited vice of constitution in children who have had parents who were old, or alcoholic, or syphilitic, or consumptive, or, in fact, were suffering from almost any constitutional disease at the time they procreated their offspring; and also we recognize that an impaired constitution can be more easily transmitted from the maternal than from the paternal side.

Infants of tuberculous parents are born with what often is called a scrofulous or phthisical diathesis. In these persons we find that their tissues are much more vulnerable, and less capable of resistance to microbic infection than those born of healthy parents. Such children frequently present a rather typical appearance that can usually be recognized at a glance; such physical signs as a long, narrow, flat chest, with an acute costal angle, together with very imperfect expansion; they are liable also to have narrow arteries and a small heart, and a thin, delicate skin, through which the veins are plainly seen. Their growth is slow, their development incomplete, and in general their constitution is delicate.

A second etiological factor is *age*. While this disease attacks persons of all ages, it invades persons before middle life usually, and is most liable to occur during adolescence and early adult life, and this more especially where a parent is tuberculous.

The third kind of etiological factors may be considered under the general heading of *local conditions*, and these local causes are second in importance only to the constitutional peculiarities. There are several subheadings to be considered, of which the first is any *catarrhal inflammation*.

Where catarrh is present the activity of the phagocytes is distinctly diminished, so that the bacilli may more readily pass the portals and attack the organism than when the body is in health. This disease is frequently said to start from a neglected cold or a bronchitis, or even a pleurisy. The second local condition is *lowered nutrition of the body*, which may be induced by some specific fever as measles, or typhoid, or by debilitating diseases like diabetes or whooping cough, or it may blaze up after a pregnancy; in fact, any exhausting illness prepares the soil for the development of the tubercle germ.

The third local condition is the irritation of lung tissue produced by *dust*, which is inhaled into the lungs in the various occupations to which working people are often exposed, as stonecutters, coal miners, glassworkers, filecutters, polishers, and in general among those persons who are compelled to stay in workshops where the air is laden with the fine particles which are given off from materials in the processes of manufacture.

The fourth local condition is *trauma*, such as contusions or fractures, a resection of a strumous joint, or the aspiration of a tuberculous pleurisy; any of these may give rise to a general infection. In injured tissues also the vitality is lowered, and bacilli grow rapidly.

Next let us consider some of the various avenues by which the tubercle bacillus enters the body.

By far the most common mode of infection in phthisis pulmonalis is through the air. The expired air of a consumptive is not contagious; this has been proved often by having patients breathe into small glass cylinders which were coated on the inside with nutrient gelatine and then endeavoring to cultivate the germs which might be deposited on the surface of the gelatine. It has been universally found that the culture medium is sterile as regards the tubercle in the expired air. It is the sputum, coughed up from the diseased lungs of the phthisical, that is infectious and dangerous, and if this material is spat out, it rapidly dries and then the fine, bacilli-laden dust is disseminated through the air, and is inhaled by the same or other persons. In a general way the more thickly people are crowded together the more prevalent is phthisis among them. So that we find the disease more frequently in the city than in the country, and in cities it is more rife in tenements and back-to-back buildings than in less crowded and more open parts of the city. Under the most favorable conditions for its development, the germ is exceedingly prevalent and dangerous. As for instance, there was found in a certain convent in Germany, where the sisters were not allowed to leave the premises, that 62% died from this disease, and in another convent of nursing sisters the mortality from consumption was 75%, the sisters seeming regularly to die from the disease. In prisons also, where persons are closely crowded, the mortality from phthisis is four times that of ordinary localities, and in one Austrian prison 60% of the

prisoners who died, had consumption. In the cases of the convents and prison, after disinfecting and admitting more light, sunshine, and ventilation, the death-rate fell surprisingly. Such reports and similar results from experiments on animals might be extended indefinitely.

The second avenue of approach of the germ into the system is by the alimentary canal, and many cases have been reported that have resulted from drinking the milk of cows that had tuberculosis of the udder, and these reports have been confirmed by direct experiments on animals. Meat from tuberculous animals eaten raw, as in some kinds of sausages, might provoke it, but such cases are rare; or by uncooked and unwashed vegetables on which the germs may have lodged; or through infected unboiled water, though cases of this description are very uncommon.

The third way in which the germs may gain access to the body is by direct inoculation, as the tubercles which occasionally appear on the hands of demonstrators of anatomy, or among butchers or hide workers, or at circumcision, or in the perforation of ears for earrings, or from accident, or from even kissing an infected individual. But these ways play an unimportant role.

And now, having studied nature's methods for destroying the germ, and also the etiological factors both within and without the body which favor the development of the bacilli, we are ready to study the pathological changes which are produced in the lungs when the germ is able to overcome all obstacles and develop in the tissues of its host.

The bacillus then is inhaled into the bronchi of the individual, and as it gets into the smaller of the bronchi the air current becomes slower and slower and the bacillus is finally deposited on the surface of the mucous membrane, when it grows, reproduces itself, and excretes its specific toxin. The tissues of the body, at once feeling the irritation of the poison, send the leucocytes to destroy the germ, but they, weakened by one or more of the etiological factors which we have been discussing, are too feeble to destroy the bacilli; on the contrary, they themselves are killed, and their dead bodies surround the germs; gradually these leucocytes accumulate and form a mass of dead and dying cells, and this mass becomes at last so large as to be visible and then is called a miliary tubercle, the earliest and smallest ana-

tomical lesion that we can recognize microscopically. This little specific tumor then by its mechanical presence presses on the tissues adjacent and prevents the blood vessels from supplying it with nourishment, so that the tumor gradually dies and undergoes the process which we call caseation or coagulation necrosis. If the dying tumor is on the surface of a bronchus, small portions of the dead material are rubbed off from the surface during respiration or an exacerbation of coughing, and a tubercular ulcer is left; the portion cast off, containing as it does many tubercle bacilli, is apt to lodge elsewhere in the smaller bronchi of the same lung, and may even be carried into the trachea and inhaled into the other side of the chest, and so the disease is disseminated throughout the lungs. Up to this time in its life-history the pathological condition has been that of a simple, uncomplicated infectious tumor, but with the advent of ulceration many other micro-organisms, which are inhaled also in the breath, are able to lodge on the diseased and dying surface, and to multiply and produce their specific poisons, micro-organisms, such as the pus-producing germs of septicæmia and pyemia. And now the disease becomes a mixed infection, and on account of the poison elaborated by all these different kinds of germs the body resistance is still further weakened, and we get the varied train of symptoms produced by the poisons of these many varieties of micro-organisms, such as fever, sweating, emaciation, anorexia, debility, cough, etc. Coincident with these changes the little infectious tumors also set up other processes in the lungs, some of them specific, some simple inflammations, and some reparative processes. Ordinary bronchitis is regularly developed. Close to the tubercles themselves a tubercular peribronchitis is developed which has a tendency to spread. Little masses of caseous material may block up the smallest bronchi and lobular atelectasis on the peripheral side results; this is followed by a caseous pneumonia which becomes necrotic and forms cavities. If the inflammatory process is in the neighborhood of the pleura, any of the varieties of pleurisy may develop. About the tubercle an intense inflammation may give rise to a localized hemorrhage. Or a vessel exposed in a cavity, by the rapid destruction of tissue about it, may ulcerate and rupture and a more profuse hemorrhage results.

All these processes are destructive; there are seen, however,

in the slowly progressing forms of the disease changes in the tissues which are conservative, and if the disease is in its incipency, or very slow in its progress, before breaking down of tissue has occurred, the tubercular process may be arrested by the body tissues, and then the patient's life is saved. The irritation about the tubercular process stimulates the connective tissue which is present in the lung to a renewed development. It forms as a wall about the part, the more thickly as the process is chronic. The connective tissue here, as elsewhere in the body, when once formed, has a constant tendency to contract, and by its contraction it presses on the tubercular mass, and gradually diminishes it in size, until finally nothing is left but scar tissue, or a little hard lump containing a calcarious substance; and even if the tissue has broken down it reduces the size of the cavity and may even obliterate it, and then the exciting cause having disappeared, the patient gets well.

From this study of the action of the germs on the system and of the causes which hinder or aid their growth, it is evident that drugs in the ordinary sense have but little specific action in arresting the disease; and, until the proper antitoxin is manufactured, we must seek to improve the condition of nutrition of the persons by hygienic, climatic and dietetic measures, as well as by medicinal treatment.

TUBERCULOSIS OF THE SKIN.*

By F. C. CURTIS, M. D.,

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That tuberculosis of the skin would be looked for is natural. Tuberculosis, the most common, the greatest scourge of the human family, causing the death when affecting its chosen and chief field of operation — the pulmonary tissue — alone of about 13,000 people in our seven million population of this State every year, or approximately two deaths per 1,000 population, annually, with its living subjects at every hand and its germinal principles almost everywhere, claimed to be a potential source of disease, primarily or secondarily, of every organ and tissue, it would appear strange if the outer integument should escape. I, myself,

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firmly believe that the proposition is a correct one, that all pathogenic germs have their chosen individual method and approach to the body, from which they exceptionally deviate; the typhoid germs take the avenue of the intestinal tract; the diphtheric germs the upper respiratory tract, and the tubercle bacillus elects the pulmonary. In time we will learn more fully the life history of all of them and their conditions, but doubtless they may deviate from an established course and may find, in other than their commonest environment, a point of approach and soil in which they may flourish.

The subject of tuberculosis of the skin, as of tuberculosis in general, has been rewritten within the last two decades. Nine or ten volumes lie before me as I write this, all written within very recent time. Those contributed to by younger men on this subject, speak with certainty of several recognized forms of skin lesion caused by the invasion of the integument by this micro-organism, the tubercle bacillus; those of older men speak with doubt, as if the decision has not been satisfactorily reached.

There is no question, however, on the part of any, that there are tubercular diseases of the skin.

The first to be mentioned is *lupus vulgaris*, and I shall only mention it, for it would go outside the purpose of this paper to elaborate upon this well-known disease. Koch discovered and it is now fully recognized, that the tubercle bacillus is to be found in the dull-red, half-pea sized lesion, of soft, boggy consistence which is its primary and predominant symptom. It is certain, from tuberculin reaction, from microscopic discovery of tubercle bacilli practically identical with those found in tuberculous lesions elsewhere, and to some extent from inoculation tests with its virus, that this is a tuberculosis of the skin, though the sparseness of the bacilli found make it not so easy to see why its irritative presence should cause the disease. The mode of infection and the causes which favor the action of the bacilli is not well established; it may be from within through the lymphatics, but very probably it is by direct infection, for the reason that it occurs in the young with delicate skin and the child's habit of picking and scratching with hands possibly infected, and largely among the poor and filthy, being more seen in public than in private practice. But no experiment has thus far, I believe, established the possibility of direct inoculation. Erythematous lupus is only

spoken of to say that it is not tubercular. In a lengthy discussion by Dr. White, of Boston, and by Unna, of Hamburg, both reported in a recent number of the Journal of Cutaneous Diseases, it is agreed that we are ignorant of its etiology.

Dr. J. A. Fordyce contributes to the March issue of the Journal of Cutaneous and Genito-Urinary Diseases, a report of a case of lupus erythematosus, in which death occurring from an intercurrent cause, an autopsy was made. There was tubercular abscess and other foci in the kidneys; there was nowhere tubercular disease of the skin—but the author makes this comment upon this illustration of the frequent association of lupus erythematosus with tubercular foci elsewhere, and its apparently being more than a coincidence: “Although the histological findings in lupus erythematosus do not point to local infection with the bacilli, we have good reason to assume that in some cases the changes in the blood-vessels and connective tissue may be due to the *irritant action of certain soluble* products of the germs.” He further adds that Dr. de Schweinitz has experimentally produced necrosis of liver-cells in guinea-pigs, with certain crystalline substances which he obtained from pure cultures of tubercle bacilli, and suggests that some cases of lupus erythematosus may result from the slow absorption of similar products, which in elimination by the cutaneous glands may set up a chronic inflammatory process, or in piercing through blood vessels may determine the changes characteristic of the disease. The suggestion is significant.

Next we have tuberculosis verrucosa, or the long recognized anatomical or post-mortem wart or tubercle. This is undoubtedly of local inoculation. It appears on the hands and fingers, especially of those working in dissecting and autopsy rooms, but not always. It may occur, as I have seen, on the hands of a hospital nurse. There is favorable opportunity for its development in those having to do with consumptive patients or handling their soiled linen. Its etiology has been proven by discovery of the bacillus and by inoculation tests. It begins as an abrasion, which is slow to heal, developing an indurated base, extending by infiltration sometimes over a considerable area. There is little tendency to ulcerate, though beneath the hardened epithelial, wart-like surface there may sometimes be oozing of pus. It is extremely chronic, lasting for years, with little tendency to spontaneous

healing, but it may disappear by absorption, leaving scar. Typically occurring on the back of the hand, McCall Anderson has described as verrucous lupus, a thickening of patches on the elbows and knees in tuberculous subjects, possibly of the same sore. (See illustrations in Morrow and Gotheil.) The treatment consists in destruction by curette, by caustic or by strong salicylic paste.

Passing to another well recognized set of morbid conditions; which we know as scrofulodermata, although like its derivative scrofula, ill-defined, we come on debated ground. Scrofula or struma, we know as a state of the system in which suppuration occurs easily, lymphatic glands enlarge and there is a condition of lowered vitality. No doubt this lowered vitality of the skin and its consequent vulnerability plays a chief part etiologically in the morbid condition, and various micro-organisms like the pus coccus set it up. But it is probable that the tubercle bacilli undoubtedly found present are a factor. Its commonest exhibition is seen in connection with enlarged glands as the cervical, with resulting cutaneous ulceration, indolent, irregular, undermined, easily bleeding, free sero-purulent and necrotic tissue discharge and often with prolonged sinus. Its start is in the subcutaneous connective tissue. It pursues a chronic course. Allied to it, at least clinically, is indurated acne, impetiginous eczema and the like. We know that its treatment by internal supporting remedies and hygiene, do very much and clinically this class of cutaneous affections eventually yield, wherein they differ from what we note regarding other tuberculosis. But the presence of tubercle bacilli, when present, should have weight in determining the tuberculous character.

Scrofuloderma, commonest thought of in this type of suppurating, indolent abscess or sinus, also shows under the type of what is known as lichen scrofulosorum, the scrofulous pupule — a rare form of disease in this country, though often seen in the European clinics. It shows as pin-head to lentil sized papules scattered over the body, mostly on trunk and abdomen, a disease of early life, and of the debilitated. They have no subjective symptoms, and usually disappear by absorption, though infrequently suppurating. It is a tubercular peri-folliculitis, and tubercle bacilli are found in the papillae.

A pustular tubercle is also a probable type of the scrofuloderm,

the so-called *acne cachecticorum*, and distinct from the ulcerative form, being more circumscribed.

Finally we come to what is more strictly designated as *tuberculosis cutis*, or, since it occurs at the cutaneous orifices, *tuberculosis cutis orificialis*. This is very rare in occurrence. It was once supposed to be the only manifestation of cutaneous tuberculosis, hence its name. It occurs in those having internal tuberculosis, though Gotheil says that it is occasionally primary. It occurs as one or several indolent, oval, shallow, small, painless ulcerations, with bases covered with reddish-yellow granulations. Kaposi and others described such and applied the name to them, ten years ago. They are seen about the mouth, nose, arms, glands, penis and also about the ear. Tubercle bacilli may be found in the secretions, which, with the presence of tuberculosis of the lung, larynx or intestines, make the diagnosis. They lack the infiltrated base of primary or secondary syphilis. Their course is slow and dependent on the course of the originating focus. Locally they call for similar treatment to the anatomical wart. Their etiology, the auto-infection of an abrasion, is entirely reasonable, but it is difficult to see why, if the possibility is established, its occurrence is not more frequent. The verrucous tuberculosis of the hands (anatomical wart) is said also by similar auto-inoculation to be found on the hands of tuberculosis patients.

If this possibility of auto-infection is established, it is worth considering whether internal tuberculosis may not ensue from cutaneous tuberculosis. Their co-existence seems established, and evidence is not lacking of the primary seat being sometimes probably in the skin, but this is a point difficult to prove absolutely. The frequency of their association is, however, significant.

The four types of lesion which I have noted, include, I believe, in various forms of manifestation, the various lesions of the skin which may be termed tuberculous.

For the most part it is apparent that the tendency is to regard them as originating by direct inoculation. Some of them, as the tuberculous wart and the orificial ulcer, are conspicuously so. It is probable that the same view may be taken of the lupus lesion, although it is possible that this may originate indirectly. It is said to have been observed to arise on the border of a tuberculous fistula. The class of skin lesions known as scrofulous,

with their varying types of manifestation, are more probably indirect, by way of the lymphatics and an invasion of the skin from adjacent tissue.

We have here a new field to study the life history of this interesting germ and one yet to be further developed. No subject is worthy of larger study than this which has very wisely been chosen as the chief theme for society work this season.

TUBERCULOSIS OF THE FEMALE ORGANS OF GENERATION.*

By A. VANDER VEER, M. D.,

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MR. PRESIDENT AND GENTLEMEN.—The subject of tuberculosis of the female organs of generation has been greatly advanced since we have been able to recognize tuberculosis of the skin, also as we have better understood that illy-defined vice of nutrition we term hereditary predisposition, which is observed at times in the ovary becoming tuberculous, and in that way infection occurring from above. We cannot ignore the fact that local traumatism, both external and internal, have their effect in the development of this form of disease, as is to be found, frequently, in robust, strong subjects, in which there is an entire absence of cachexia, and yet these patients present unmistakable evidence of tuberculosis in the organs of generation.

Few departments of surgery have presented more emphatically the marked advance that has been made in pathology than do these patients. It is true we do not meet with very many cases, yet when we look the field over, decade after decade since 1854, when Kiwisch gave us a very accurate description of this condition, we find there has been a noted improvement in presenting to the profession well-marked, characteristic cases; however, it was really not until we had reports from such careful workers as Williams and Osler, of Baltimore, and Councilman, of Boston, with other American writers, and the investigations of Koch, that we were able to grasp and describe correctly the diagnosis of these cases and then follow out a clear line of treatment. Even at the present time our modern gynecological text-books

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are not very abundant in their information and instruction upon the subject. Some of our authors still look upon tuberculosis of the external organs as museum curiosities.

In noting the careful investigations made by some of the authors above named, it is rather startling to have them state that although tuberculosis of the vulva, the vagina, and of the cervix is yet exceedingly rare, still these cases can be recognized by differential diagnosis. When we consider the uterus and its appendages we find a larger percentage of this pathological condition than has been generally supposed. The statements of Rokitansky, Virchow, Councilman and others no longer hold good that tuberculosis of the ovaries, and, as mentioned in some of their writings, including the tubes, is exceedingly rare, for this has been proven a fallacy.

The greatest assistance we have had in the diagnosis of this rather obscure condition is in our careful pathological, histological and bacteriological investigation, making our final opinion on the case in question pretty infallible, when the crucial examination is made to the bacilli of tuberculosis being present.

It seems to me there can be no question in the minds of all present to-night, that here is the broad high ground of science from which we may take our observations regarding the accurate diagnosis of these cases. We are no longer to rely upon macroscopical appearances as to the possibility of this or that case being a suspected one of struma or tuberculosis; or that the cheesy material present in the tubes, cornua of the uterus, or possibly the ovaries, is a doubtful condition, but rather by careful histological and bacteriological investigation find the absence or presence of the tubercle bacilli.

When such careful observers as Edebohls, Martin, and Williams, of John Hopkins, give us a percentage respectively of four, three and eight, as the result of their work in the operating theatre, regarding examination of the appendages removed for inflammatory disease, we realize the subject is one that has been thoroughly studied, and that there was an uncultivated field, a field that had been sadly neglected.

With such classification of cases we can now advance upon a higher level, working in a more intelligent atmosphere of certainty regarding the exact disease our patient is suffering from. When we read that the modern writers in this country

find, in post-mortem investigations, and in operated cases, that there is from one to eight and ten per cent of tuberculous disease present in the female pelvic organs, it is most assuredly a very emphatic presentation of the subject.

General tuberculosis has been recognized at as early a period as ten weeks, but the greater number of cases have been between the ages of twenty and forty, and it is believed that it prevails to a larger extent during the latter period of sexual activity.

I have observed general tuberculosis in one of my cases at the age of ten years, the same in extreme age; and, again, secondary infection is to be seen when the condition is not strictly a local or primary development. We must ever take into consideration, in the further study of these cases of the disease, as it presents in the external organs of generation, the possibility of specific disease-syphilis in some form, the time of life, etc., as to the possibility of malignancy being a factor, and finally when an ulcer presents that does not give the characteristics of either of these lesions, we have the sure test and best aid in the use of the microscope.

While the history is not as clear as can usually be obtained in other forms of disease, yet if we find the family of the patient possesses a tubercular diathesis we should be thoroughly on our guard as to the nature of this lesion. We can no longer make excuses as to the possibility of the absence of tuberculosis in the ulcerative conditions that present in the external organs of generation.

Cases of lupus of the vulva have been described which were really tubercular ulcerations in the advanced stage of pulmonary tuberculosis.

It is so well an established fact that tuberculosis attacks the skin, that the development of tuberculous ulcers upon the external genitalia is not to be questioned. It is also true that cases of tuberculosis of the uterus are not at all infrequent, and not associated with general tuberculosis of the system. In regard to the latter organ, however, in the majority of cases, the disease is limited to the mucous membrane. In this respect the procuring of leucorrhœal discharge, or of specimens, either by section or curetting, for microscopical study, immediately clears up the doubt.

In studying the clinical history of tuberculosis of the tubes and

ovaries we find it by no means clear — some cases are greatly obscured.

The information given by the patient may or may not be accurate as to the seat and nature of the trouble. Gonorrhœal infection, often known to be present in these cases, is sometimes grafted upon a mass of what may really be but a true condition of tubercular infection. This is likewise true of pelvic peritonitis, when ushered in by any one of the etiological factors presenting in these cases, producing, to a certain extent, a true tubercular condition that is found when an operation is called for and done.

True tuberculosis of the ovaries is exceedingly rare, yet often present and found associated with some condition of the tubes and general peritoneum in such an obscure manner as to blind us in our study of the clinical history. Even at the present time we read of cases in which an operation has been suggested for relief of a supposed ovarian cyst, possibly of general dropsy, or of presumed pyosalpinx or hydrosalpinx, and when performed shows beyond dispute that the trouble was tubercular in character.

That tuberculosis of the female genital organs is at times a local manifestation of the condition of the system there can be no doubt. Likewise that it is but a local condition due to the planting of the tubercle bacilli there, through the direct communication of soiled fingers or instruments, is equally true, and, as stated by Cohnheim and Verneuil, a woman can be infected by a tubercular husband during coitus, as bacilli have been found in the semen of tubercular patients, as well as in the discharge attending tubercular epididymitis.

The views of authors past and present differ greatly as to the frequency and point of origin of tuberculosis of the female organs of generation. Senn says that tuberculosis of the genital organs in both sexes seldom presents itself to the surgeon as an isolated affection, and the records of pathologists who conducted the examination after death in such cases usually show the widest dissemination of the tubercular process, involving often numerous and anatomically the most disconnected organs. There can be no question, however, that the most frequent methods of infection are through the general circulation and by extension of the tubercular processes from adjacent organs.

That the disease originates more frequently in the tubes themselves, as a local disease, or in connection with general tuberculosis of the system, and then infects the uterus, also the cervix, is the strong point to be observed in the study of these lesions.

“Spaeth (*Genital Tuberculosis beim Weibe*,’ Dissertation, Strasburg, 1885) has collected 119 cases of tuberculosis of the female generative organs, and found that in 28 cases the process involved the entire genital tract, 9 times the vagina, 10 times the uterus, 103 times the tubes, and 15 times the ovaries, either primarily or by extension from other parts of the genital tract.” (Senn.) In nearly every case the tubes are the starting point of the disease, and it extends from these to the uterus, ovaries and peritoneum. Gehle calls attention to the infrequency with which tuberculosis of the female genital organs extends to the urinary organs, in comparison with the same disease in men.

Unquestionably laceration of the cervix, repeated abortions, renewed and continued attacks of pelvic peritonitis, gonorrhœal infection, traumatisms, a constant and continued overloading and constipated condition of the rectum, and persistent leucorrhœal discharges are all etiological factors in the study of this subject.

Undoubtedly the symptoms and diagnosis are to be based still upon the classification by exclusion, aided by discovery of the tubercular bacillus.

When a patient presents with local irritation, which she has observed in the form of a slightly hardened mass, often described like a split pea, located about the vulva, at some point about the anterior or posterior fourchette, or opening of the vaginal outlet, or within the walls of the vagina, perhaps located as a distinct grayish-looking ulcer about the lacerated cervix, an elongated posterior lip, with inflammatory tissue, possibly a profuse leucorrhœal discharge, not irritating in many instances, yet so great in amount as to be distressing, now and then tinged with blood, we should not delay in looking for tubercle bacilli. The element of malignancy should be carefully considered, if the serous bloody discharge is persistent, especially if the odor is very pronounced.

The odor is believed to be less unpleasant whenever the labia becomes the seat of local tuberculosis, but the moisture and warmth of the parts favor early necrosis. One point is at times

healed while the ulcer is rapidly spreading in another direction. It is more apt to occur in young people, accompanied by tuberculosis of other parts of the body, and will recur at times after apparent healing.

“Differentiation is not always easy as between epithelioma and syphilitic ulceration, but may usually be based upon the following points: 1. Age of patient; tuberculosis more frequent in early life, and epithelioma in later life. 2. The history; antecedent syphilis; tuberculosis in other parts of body. 3. Appearance of ulcer; more abundant, fetid secretions from epithelioma. 4. Effect of treatment. 5. Bacteriological tests.”

It is one of our earliest duties in these doubtful cases as to the possibility of their being carcinoma or tuberculosis, to make microscopical examinations.

Tuberculosis of the cervix, whether primary or secondary, tends to limit itself to that structure, in the first instance being frequently the only tubercular lesion in the entire generative tract. In these observations we find the most important bearing upon the theory of causation. We are led to believe that the etiological factors must embrace something besides the theory of infection from tuberculous discharge higher up in the passages of the peritoneal cavity. The latter cause is sufficiently plausible and plain in some instances; but where the disease is confined entirely to the cervix, one must look for infection through the blood or directly from without for the real cause.

“It may be stated as a broad fact that tuberculosis of the female genitalia grows progressively more uncommon in occurrence as it descends from the ovaries, the tubes and the uterus into the vagina and vulva. Tuberculosis of the vagina by extension from above is hardly to be called very rare. Involvement of the vagina alone is far from common, and when it does occur in some cases the vulva may be more or less involved.” (Senn.)

This is a fact: that the disease when found about the vagina, in the vast majority of cases, is to be noted more particularly upon the posterior walls and upward towards Douglas' cul-de-sac. This is probably due to the stagnation of infecting material, either from the uterus or from without the genital tract. We must bear in mind that it is possible for the vagina to become infected by tubercular ulceration of the rectum. I have seen cases of tuberculosis of the vagina which produced a fistula

extending up through the labia, upward into the buttocks, and becoming complicated with ischio-rectal abscesses.

Miliary tuberculosis, as well as the caseous form of general tuberculosis, presents in much the same way, as demonstrated by microscopical examination.

It is interesting to observe that experiments upon rabbits have shown that bacilli introduced into the vagina, that organ having previously been irritated by the application of iodine, did not produce genital, but general tuberculosis.

When the cervix is implicated we should lose no time in procuring some of the uterine discharge for microscopical examination.

In this we are greatly aided by the employment of the curette, cases often being cured under this thorough line of treatment.

If the uterine walls are implicated, entire removal may be required, and is a justifiable operation at times.

We find the greatest obscurity in our study of the tubes and ovaries. It has been well stated that in the absence of tubercular lesions of the vulva, vagina and uterus, it is doubtful if infection of the Fallopian tubes can take place by the entrance of the bacilli through the genital tract, its presence only being explainable by attributing it to auto-infection in the same way as we have explained the occurrence of primary tuberculosis of joints and peritoneum.

Beyond doubt a large proportion of tuberculosis of the Fallopian tubes occurs primarily, but, as has well been stated, it may occur secondarily. Uterine infection is frequently associated with pelvic peritonitis, and is a condition present in diseases of the lungs and of the intestines. In some cases the appearance of pus is supplanted by the cheesy, calcified material of the tubercular change, in these cases the uterus becoming infected secondarily. In advanced cases the whole mucous membrane is destroyed. Generally the tubes are out of place, often drawn down along the edge of the uterus, and bound down to neighboring parts by adhesions.

Tuberculosis of the tubes is not, by any means, as uncommon a disease as is generally supposed. The few cases in which it is met with primarily have been attributed to direct infection, by having the semen of a tubercular man pass directly into the genital tract. He may have been suffering not only from pulmonary tuberculosis, but from a tubercular testicle.

Edebohls says that the diagnosis of tuberculosis of the tubes and peritoneum, without ascites, is based mainly upon the detection of localized, irregular thickenings — tubercular tumors — in various parts of the abdominal cavity.

Osler offers us more valuable assistance in the following sentence: "The association of a tubal tumor with an ill-defined anomalous mass (tubercular tumor) in the abdominal cavity should arouse suspicion at once."

Edebohls is inclined to go a step farther and submits the following proposition: The co-existence of a tubal tumor or tumors with plaque-like thickenings of the subperitoneal tissues points with great positiveness to tuberculosis. The tuberculosis, under these conditions, may fairly be assumed to be primary in the tube or tubes, if no other deep-seated tumor can be palpated in the abdominal cavity. Exploratory puncture of the tubal tumor may, in exceptional cases, make positive the diagnosis of tubal tuberculosis."

It has been observed that it was very rare to find tuberculosis of the tubes alone in women who have been married for some years and who have borne children.

Careful observations have shown that tubercular disease is confined mostly to the tube itself, occurring among the young and unmarried, and the following case bears out the theory nicely: Miss J. K., aet., fifteen years, single, a student. Family history somewhat in the direction of tuberculosis. Menstruated at thirteen; regular for one year, then profuse at times and somewhat painful. At end of a year patient began to emaciate, and was treated for more than a year by a specialist at his sanitarium, with hot-water douches, application of glycerin tampons, iodine, etc., but without any marked improvement. When she came under my observation there was bilateral enlargement of the tubes, uterus was somewhat fixed, patient greatly emaciated, and suffering, as I believed, from tubercular peritonitis. No abdominal fluid. The tubes were found greatly enlarged and distended, on section; ovaries apparently healthy, but removed with the tubes — on examination the tubes were found to be tubercular in character. Ovaries free from disease. This patient made an excellent recovery, remaining in perfect health.

Here the disease was confined entirely to the tubes, the ovaries and peritoneum having escaped. As stated, this case is con-

firmatory of the point in regard to the disease occurring among young unmarried women.

It is true we do not find the ovaries implicated in many of these cases, and that the fimbriated end of the Fallopian tubes becomes closed, a wise protection on the part of nature, it would seem, of the peritoneum from infection.

Beyond a doubt tuberculosis of the ovaries is much rarer than tuberculosis of the tubes and uterus, and it is fair to infer that when infection takes place it is through the circulation more particularly.

In many cases of tubercular appendages, it is really a local manifestation, due to some etiological factor, to which we have referred, or as a proof of the tubercular blood or constitution of which the patient is possessed; therefore, when we have a patient who suffers from pelvic disease, and all conditions, such as tumors, pelvic abscesses, etc., are to be excluded, and we have present the constitutional symptoms, such as temperature, increase of pulse-rate, a hectic and anæmic appearance, all pointing to some obscure condition of the uterine appendages, we do not usually go astray in a direct exploration, and it is not surprising that we find a large number of these cases to be of the character of local or possibly general tuberculosis.

In tuberculosis of the ovaries, miliary tubercles are the exception.

It is very difficult to make the diagnosis between tuberculosis of the ovaries and chronic oöphoritis. When it is possible to make the former diagnosis the ovaries should be removed as promptly as possible.

Ovarian cysts are sometimes studded with subperitoneal tubercles, as has been observed by a number of writers, yet removal of the cyst seems to relieve any sympathetic involvement.

Symptoms.—The primary sore, whether connected with the vulva, or vaginal wall, will present at times a distinct ulcer, the margins of which are decidedly thickened and occasionally indurated, so as to give one the impression of a syphilitic sore.

I had an exceedingly sad case occur in my practice. An advanced case of phthisis, in which the local sore about the vulva gave rise to a very strong suspicion that she had contracted syphilis. The party was above all possible suspicion, but a careless remark on the part of the medical attendant caused

much heart-burning and distress in the family relations. Had I known then and made an examination for tubercle bacilli, I am sure it would have demonstrated the fact that the case was one of infection from general tuberculosis of the system.

I have seen a well-marked case of tuberculosis of the walls of the vagina in which the latter was studded with little elevations very much like a split-pea, white in appearance, containing caseous material, strictly tubercular in character, the patient having a family history of tuberculosis. This patient progressed nicely to complete recovery under local treatment.

In the study of these cases one should be exceedingly careful as to the classification of all symptoms, and not confound one diseased organ with another, the following case being a striking example: Mrs. H. S., aet., twenty-six years; two years married; husband said to have had specific urethritis one year previous to marriage. Within a few months after marriage she developed a urethritis and cystitis, and it was supposed she was suffering from salpingitis due to gonorrhœal poisoning. Patient was treated in a special sanitarium for uterine troubles; bladder washed out once or twice in twenty-four hours for a period of six months; local applications made to the cervix; vaginal douches in large quantities employed, but no improvement resulted and patient emaciated constantly. When I saw her, October, 1893, I found a double pyosalpinx, as I believed, and advised immediate operation, which was done a few days afterward. This was found to be a case of tubercular tube trouble.

This case bears out the observation previously made that we may have grafted upon tubercular tubes a pyosalpinx due, possibly, to specific infection.

We should be cautious in these cases as to how long we continue hot-water douches and hot applications, but do an early exploration and operation for removal of what may be present in the way of diseased tissue.

Even though there may be pulmonary tuberculosis present in these cases, yet if there is local ulceration about the vulva, walls of the vagina, and of the cervix, the most gratifying results will follow the careful, thorough use of the thermocautery, in some instances, of ichthyol, iodine, aristol, calomel and creosote, careful curetting, complete extirpation of inflammatory areas of implicated tissue, the removal of diseased glands, repair of the

lacerated cervix, the free lancing and leeching of vesicles that may present at different points, and packing with iodoform-gauze. I believe that in all cases of tubercular endometritis thorough curetting should be employed, wiping out the cavity of the uterus with carbolic acid, the use of peroxide of hydrogen, and careful packing by means of strips of iodoform-gauze is a procedure that should be tried exhaustively. This failing, then the total extirpation of the uterus becomes necessary, and in no case of tuberculosis of the body of the uterus should the ovaries be left behind.

In cases of tubercular disease of the tubes and ovaries, complete and thorough operative intervention should be our one course of procedure. When this course is decided upon, the route must be left to the inclination of the operator, I, myself, preferring coeliotomy, and have every reason to feel gratified with the results.

TUBERCULOSIS OF THE MALE GENITALIA.*

By JOSEPH D. CRAIG, A. M., M. D.,

Adjunct Professor of Anatomy in the Albany Medical College.

It is something of a task, one beset with many difficulties, to consider the manifestations of tuberculosis of the male genitals to the exclusion of the urinary tract. So intimate seems to be the physiological as well as anatomical connection between the two and so rapidly and so generally becomes the involvement of either when the other begins to become infected with the tubercle bacilli, that, in fact, the two are well-nigh inseparable.

By tuberculosis of the genital tract in the strict meaning of the term, we have in mind tuberculosis of the testicle, epididymis and vas deferens, tuberculosis of the prostate gland and seminal vesicles, and tuberculosis of the penis and urethra.

It would, of course, take us too far beyond the limits of a paper such as this, to consider all the factors of interest in the local infection of the genital tract, so that I have thought it wise to limit the theme of this paper to the consideration of the source of original infection, whether primary or secondary, and to the very brief statement of some of the principles of the treatment of the tubercular testicle.

* Read before the Medical Society of the County of Albany, March 22, 1899.

It seems strange, but it is nevertheless the fact, that the term "primary" is used in two entirely different senses, when applied to tuberculosis of the male genitalia. I do not know of the same double meaning of the term when applied to any of the other systems of the human body.

In the first place, "primary" tuberculosis is defined, as in the usual sense, as an original infection of some one of the genital organs, the remainder of the body being free from all tubercle bacilli. In the second place, "primary" tuberculosis has reference to an original infection as limited to some one of the genitalia, tubercle having already infected the respiratory, digestive or other tracts.

From the very nature of the case, any discussion of primary or secondary tuberculosis of any of these organs of the genital tract must be largely speculative, as there is always uncertainty in determining the primary nodule, so many times tubercular foci are found, post-mortem, in most unlikely and unsuspected places, in subjects who have died of other pathological processes, foci which had never given clinical evidence of their existence. In illustration of this, Weigert made nine autopsies of patients, dead of tuberculosis, whose genitals presented no evidence clinically of tubercular involvement and, yet, tubercle bacilli were found in five out of eight times in the testicle and four out of six times in the prostate gland.

And conversely, tuberculosis of the genital tract, apparently primary, has been found to originate in a tubercular focus in the lungs or intestine. Thus Bollingen notes: "That it is possible for bacilli to enter the lungs, leaving no trace of their passage, infect a bronchial gland first, insidiously develop foci there, from which the bacilli may be carried by the blood stream to find lodgment in the epididymis or testis, there to develop, in turn, a nodule, which, on account of its situation, offers palpable evidence of its existence long before the disease can be recognized in the lungs by the most expert diagnostician."

If we use the term "primary" as applied to tuberculosis of the genitals in the first sense, that is, as an original infection, the remainder of the body being uncontaminated, we may set it down as a universal proposition that tuberculosis of the male genitalia is never primary. To this generalization there are but few exceptions. It may be possible that, in rare cases, a primary

focus may be found on the glans penis or in the anterior part of the urethra. If so, the source of infection is evidently from secondary tubercular ulcers on the female genitals, but such a condition is very rare. Kraske has observed a tubercular ulcer on the dorsum of the glans penis of a patient, forty-nine years of age, which was proved microscopically to be so after amputation. Other equally authentic cases are on record. There are not many. The condition is very rare.

It would be scarcely possible for infection from without to reach the thoroughly protected testicles, prostate or seminal vesicles. Infection would be only possible through some contiguous organ as the rectum or bladder, and in such a case the infection must be, strictly speaking, a secondary one. Tuberculosis of the genitalia is more common in the young about the period of puberty or beyond, during the time of the greatest activity of the genital function. In such, instruments are so rarely passed into either bladder or rectum, that even such mode of infection is extremely unlikely. The disease is not so common in old men, yet it might be considered a possibility, however unlikely, that a tubercular process might be inaugurated in the deep urethra or beyond in the bladder by the passage of dirty catheters, but infection so carried would be primary to the urinary tract, the bacilli reaching the periprostatic tissue later through the trigonal mucous membrane.

Notwithstanding all that has been said about congenital tuberculosis, inside and outside this medical society, there still persists a small minority of competent men who believe it possible that a primary focus, in the testicle, for instance, may, having been implanted in utero through the placental circulation, remain quiescent until the active period of sexual life, particularly at puberty, when excited by the activity of the gland or by trauma, gonorrhœa or congestion, it may develop a primary lesion. However, the number of those who so believe is becoming constantly smaller. The belief that tuberculosis of the male genitalia is never primary is becoming more universal all the time.

The consideration of the question of primary tuberculosis of the male genitalia in the second sense involves us in many more difficulties. Here everything is mostly speculation. There are few, if any, reported cases which bear conclusive evidence. The body outside of the genital tract is already infected. What part

of the tract will be most likely to receive a metastasis which would form a primary focus for the tract and start, in it, the general pathological process? But how uncommon one single focus must be, the metastasis so very many times more is likely to be multiple. It is so difficult, too, to state positively that any recognized tubercular lesion is the primary one, so irregular and uncertain is the progress of the infection.

It is not possible, either, to consider satisfactorily this question exclusively from the standpoint of the genitals. The urinary tract is a necessary and essential factor.

Pathologists have divided themselves into two classes so far as this question is concerned. On the one hand is Virchow, Zeigler, Forster and Steinthal, holding that tuberculosis of these tracts always begins in the kidneys and descends to the organs below. On the other hand is Rokitansky, Birch-Hirschfeld and Bardenheuer, who hold that the process begins in the testicle or prostate and then ascends to the organs above. The process is one of infection by continuity of tissue. The mere fact of their being two schools leads one to infer that the evidence of either is not clear and conclusive. It is rather contracting also the possible methods of infection to limit the spread of tubercular foci to continuity of tissue. Metastases through the lymphatics and blood channels must always receive serious consideration as a possibility for the very rapid dissemination of tubercular emboli.

It seems reasonable to suppose that metastases may take place in either kidney or testicle of prostate gland with almost equal frequency. This seems certain, however, that once infection has taken place in either organ the process of infection is apt to spread with considerable rapidity to the rest of the tract. Notwithstanding all that has been written, the conclusive evidence of concurrent clinical history and post-mortem finding is still wanting to show in just what manner and in what sequence the genito-urinary tract is most likely to be infected.

Applying ourselves particularly to the elements of the genital system it is more easy to prove the relative frequency of primary infection considered in the second sense. Reclus says that the testes are never the seat of primary tuberculosis. The prostate gland and seminal vesicles are always invaded first, and Guillot in his conclusions from fifty-nine autopsies proved that many

tubercular prostates and vesicles existed without the involvement of either bladder or testes. No one genital organ being as a rule ultimately diseased to the exclusion of the others, it is only at the very beginning of the infective process that a differentiation can be made.

It seems to be pretty conclusively shown that the prostate gland stands first in the frequency of primary infection; then come in order the seminal vesicles, the vas deferens, the epididymis and testicle. The penis and urethra are the least likely to become infected primarily.

Before considering the treatment of tuberculosis of the testicle it is desirable to bear in mind the intimate connection of all parts of the genital tract through direct continuity of tissue. From the secreting cells of the testicle we can pass directly through the epididymis, vas deferens, prostate and seminal vesicles to the urethra. It is also desirable to bear in mind that it rarely happens, if ever, as a practical problem, that one element of the genitalia is infected to the exclusion of the others and whichever one may present for treatment, it must always be understood that the prostate too is infected and complicates what otherwise might be an easy solution of the difficulty. There is a very close relation between the testicle or epididymis and the prostate gland, and there are those who say that there is no tubercular epididymis or orchitis presenting for treatment in which the prostate gland has not already and antecedently been infected. So with this knowledge in mind that every tuberculous testicle has behind it a more or less general systemic infection with a general infection of the prostate and other organs of the genital tract, the treatment of tuberculous testicle becomes so very many more times a matter for medical rather than surgical relief. The complete and early removal of a tuberculous testicle, in the hope that it may be primarily infected, thereby removing a pathological menace to the body, has not always been a brilliant success.

The remedial measures, creosote, hygiene, climate and diet, which are so applicable to the general condition and sometimes successful, are often, also, instrumental in producing a marked improvement in the local infections of the testicle.

The pathological sequence of tubercular testicle begins with an infection which cannot be diagnosed, runs through the nodu-

lar form, proceeds to suppurating foci through mixed infection and ends with the complete destruction of the organ. Beginning with the primary infection the process may stop there or at any later stage.

As I have looked over the literature of this subject it has seemed to me that the surgical treatment of tuberculous testicle was not exclusively either medical or surgical. Either or both might at times be the proper method. Medical means are the more uniformly successful for the tuberculous process up to the formation of suppurating foci. Then continuing the medical means to add thereto the arts of the surgeon in opening, curetting and packing the suppurating foci, leaving the ablation of the entire testicle as a last resort for those testes in which the testicular structure had been completely destroyed and is actively yielding to the inroads of the pus-bearing bacteria.

It seems to me as useless to resort to medical means to cure a suppurating tuberculous testicle as it is unwise to excite a more rapid extension of the disease by surgical interference with a testicle that presents only scattered tubercular nodules.

PRESIDENTIAL ADDRESS.*

By T. D. CROTHERS, M. D.,

Medical Superintendent, Walnut Lodge Hospital, Hartford, Conn.

The great pleasure we find in welcoming you to the second meeting of this Association is increased in the thought of the personal interest we have in each other, an interest growing out of the fact that we all started on our medical voyages from the same port; we were prepared and fitted out at the same dock, and drew our cargo and supplies from the same sources, and we all left the same harbor. Now out on the wide ocean, we can draw near, drop anchor, and talk over the past, and compare its varied triumphs and losses. We are proud of the fact that in New England, the Alumni of the Albany Medical College are in the front rank with physicians of all other colleges. They are occupying the highest places

*Delivered at the meeting of the New England Alumni Association of the Albany Medical College, at Walnut Lodge Hospital, Hartford, Conn., September 20, 1899.

with equal credit and reputation. It is also a pleasure to know that the old college is sending out yearly strong and well equipped men for the larger and more exacting requirements of professional work. The Albany Medical College has always been noted for the strong personality of its faculty, and for its direct teaching. Every class of graduates carried out a certain impress and influence which followed them in all after life. This we are conscious of in ourselves and we can trace it clearly in others. Some of the older teachers so sharply impressed their personality on the students that the thought and conduct of all after life is often a mere reflex of the teacher. It is this old college atmosphere and special psychical mark which creates a keener interest in each other, and pleasure in a personal acquaintance, and comparison of experiences.

The Alumni in New England, for this and many other reasons, should seek a personal acquaintance with each other, and come into closer relations by frequent reunions. In this way we may kindle anew some of that old personality and spirit which began with us at the dawn of our professional life.

A yearly visit to Albany is always one of pleasure and sadness. We note the changes with joy, but are depressed at the absence of familiar faces. But here we can gather in our thickly settled towns and cities and renew our acquaintance, make new ones, and come into closer relations with all our contemporaries and those who have gone before or followed us in our professional work. It is a knowledge of the failures and successes in the work of others in the same field which gives keener pleasure and greater zest to our own work. Our medical societies and professional contact have with them a certain hard, grinding interest which becomes wearisome and chilly; but meeting with those who began training in the same surroundings with us, and who have come down on parallel lines brings a more genial warmth and atmosphere of rest and pleasure. This we need. Each meeting will be a needful relaxation, with returns to the past, and a revival of its fading memories. There are over a hundred graduates in New England who should be united in this Association. We all need the stimulus of their acquaintance and association, and to each one of us the cares and burdens of life will be

the lighter for these reunions. Beyond this our hearty support and interest will go back to the able and energetic faculty at Albany in their arduous labors and duties. As New England physicians we are very busy men, in a very busy country, surrounded by very busy thinking men and women. In science we must be intensely practical, and in society we must keep near the front in the wide range of high thinking and reading. It is this strain which constantly increases, and the gospel of rest we preach to others we do not often practice ourselves. This Association, meeting every year, will be the occasion for that rest and change so essential to each of us. Let us join most heartily in these social reunions, and form a larger acquaintance and closer personal union, and help to lessen the strain and widen the pleasures of our work. Let us feel that our own pleasure is only a part of the influence of the Association on the coming graduates and the old college, and the future with all its great possibilities. Our Alumni meetings must be personal, must be informal, genial, vital and local. They must be gatherings from which each can draw new hopes, and go away with more faith and encouragement to take up the daily tasks and duties. With the hearty co-operation of each one we can gather every graduate in New England at our next meeting, and begin the new century more helpful to each other and better able to meet its requirements.

Correspondence

VIENNA LETTER.

VIENNA, AUSTRIA, 29 *September*, 1899.

Vienna appears to be the Mecca for medical pilgrims from America and the Allgemeine Krankenhaus is the temple where homage is paid to science. The memories of Skoda, Hebra, Stellwag, Bamberger and Billroth pervade the atmosphere and the teaching of men like Nothnagel, Fuchs, Albert, Politzer, Krafft-Ebing and others, inspires the earnest seeker after knowledge.

The Allgemeine Krankenhaus is undoubtedly the largest hospital of its kind in the world. It was built in 1792, dur-

ing the reign of King Maximilian and has been enlarged since. The buildings, however, are all old, and one should not come here to see any improved or scientific equipment or construction. The buildings are rather low and are built around quadrangles or courts. There are nine of these courts which are connected by passages and driveways. The first court is very large and is well laid out with trees, flower beds, etc. There are a number of statues erected to the memory of former professors and also several fountains. The patients are allowed to roam about promiscuously in the courts. They all wear a linen hospital outfit. In the hospital there are upwards of two thousand beds and the population last year was over 26,000. The poorer class of patients come here as this is a public hospital and they have no accommodations for private patients. Thus all the patients can be used for clinical examinations and demonstrations. The assistants in the various divisions are permitted to give "courses" and to use the material in the wards for that purpose. Herein lies one of the great advantages for post-graduate work in Vienna. The number of men in each course is limited, generally to five or ten, and so they get much personal instruction, and what is more, are allowed to go on the wards and examine the patients outside of the regular course hour. This is not permitted in the other universities. In Berlin the men who are taking their *Ferien* courses are only permitted to examine the patients during the demonstration in the hour assigned, and in none of its hospitals are they allowed to go on the wards and examine the patients at will. In Vienna one can "get at" the patients.

There are several other large hospitals in Vienna owned by the municipality, and courses are given in all of them. Last year the number of patients in all the hospitals was about 56,000, and a much larger number of dispensary patients. The amount of available clinical material in Vienna is enormous.

The favorite course with the Americans is given by Professor Albrecht on Gross Pathology. The like of this course cannot be found elsewhere. Every patient who "zu Grunde gegangen ist" is brought to the Pathological Institute. In this way every diagnosis is verified or not by skilled men.

The pathologist often takes a malicious delight in finding a wrong diagnosis. Thus they have a number of autopsies daily and all the diseased organs are removed and carefully demonstrated by Dr. Albrecht each evening. This course is valuable not only for the intending pathologist but it also enables the general practitioners to become familiar with the macroscopical changes wrought in the human body by disease. Professor Stoerk, the well-known laryngologist and professor in this university, died in the middle of September, after a rather lingering illness. His writings were numerous and gave him a world-wide reputation. He was a student and co-worker with Türck, the discoverer of the laryngoscope. It will be remembered that Professor Stoerk was called to Berlin to treat the late Emperor Frederick, which visit gave rise to some feeling between him and Sir Morell Mackenzie. His successor as head of the nose and throat department has not yet been chosen.

An almost unprecedented fall of rain caused heavy freshets in the southern part of Bavaria and along the Danube so that for over a week there was no railroad communication with Munich. This unfortunately occurred just before and during the annual meeting of German Scientists and Physicians, and very few of the Vienna members were able to be present. The convention was a great success and nearly three thousand members were present. The meetings in the thirty-seven subdivisions were well attended and many valuable papers were read. At the first session Professor v. Winkel delivered the address of welcome and Prince Ludwig Ferdinand, a nephew of the Prince Regent, was made chairman. Prince Ludwig is a physician and devotes a good deal of his time practicing medicine among the poor people. At this session Professor v. Bergmann of Berlin spoke on the diagnostic importance of radiography. The greatest value lies in diagnosing the early stages of bone disorders and in detecting the presence of foreign bodies. It also shows the surgeon whether or not congenital defects are operable. He does not attach much importance to the diagnosis of internal disease by this method, although there has been much advance in this line during the past year. The redness and inflammation sometimes caused by the Roentgen rays are about the same

as that caused by the sun, and Professor v. Bergmann attaches no therapeutic value to them.

The Anna Kinderspital in Vienna is one of the very first hospitals built exclusively for the care of sick children. This hospital was built in 1837, and one can readily see the great stride made in this branch of medicine, as there is hardly a city of any size that has not one or more hospitals especially constructed for this work. A pavilion was built ten or twelve years ago for contagious diseases and the contrast between it and the main building is a striking object lesson in the advance of asepsis, ventilation and heating, as applied to hospitals. The director, Professor Widerhoffer, is well-known in pediatric circles.

Not very much is known about the etiology of ichthyosis, and the following case has more than a passing interest in this connection. An infant, four weeks old, was brought to Widerhoffer's clinic with congenital ichthyosis. The process covered the whole body and it was an extreme case of the disease. On questioning the mother it was found that this was the second child and that the first child has the same skin affection. No history of any such trouble could be traced on either side of the family, but it was found that the mother had had psoriasis for several years and well marked lesions of that disease were present. Kaposi, in his book, makes no reference to any connection existing between psoriasis and ichthyosis.

The strict laws in Austria make it somewhat difficult to commit suicide in the popularly approved fashion of carbolic acid, rough on rats, etc., so the despondent Viennese resort to the use of phosphorus. The mode of procedure is to buy three or four boxes of matches, cut off the heads, make a decoction therefrom, and gulp down the contents. Another fruitful source of phosphorus poisoning lies in the popular belief that it will produce abortion. In the past ten days Professor Albrecht has demonstrated the organs in three cases of phosphorus poisoning so that it cannot be an infrequent mode of death.

A case of ruptured uterus following forceps delivery occurred in the Frauenklinik in Munich before I left. As such an accident is not very frequent I will briefly give a few

of the points in the case. A. M., factory girl, II-para, 24. The first delivery was difficult and completed by forceps, the child dying shortly after. The parturiens had a relatively contracted pelvis of low grade. The first stage lasted ten hours and the temperature rose to 101° F., pulse 96. In a few hours the contraction ring was over the umbilicus and the foetal heart tones rapid. The condition of the mother also indicated interference. The head was firmly fixed at the pelvic entrance in the L. O. A. position. The extraction was difficult and attended by a perineal laceration, which was immediately united. The child was asphyxiated, but after prolonged attempts at resuscitation, lived for several hours. There was very little hæmorrhage and the uterus contracted well. In half an hour Credé's method was tried, as the placenta had not advanced. This not proving successful, a manual examination was made which revealed the fact that the placenta was not in the uterus but in the abdominal cavity. I had hold of the fundus at the time and could plainly feel the fingers of the examiner on the outer surface of the uterus. The placenta was removed with much loss of blood. An infusion of normal salt solution and hypodermics of camphor oil were given. The uterus was packed with gauze and a laparotomy performed a couple of hours later. The rent was in the lower anterior portion of the uterus and about six inches in length. This was united by means of catgut sutures. The operation lasted about an hour and subcutaneous infusions of normal salt solution were given as well as hypodermics of camphor oil. Ether narcosis was chosen owing to the weakness of the heart and the preference of the Americans for ether being known, I was chosen to administer it. The patient took the ether well and there was no disturbance of respiration. About four ounces were used. Twenty-six hours after the operation the patient died from internal hæmorrhage. The autopsy was made by Professor Bollinger and the anatomical diagnosis was as follows: Rupture of lower anterior uterine segment. Small rent in vagina. High grade anæmia. Brain very anæmic. Right sided pleurisy. Broncho-pneumonia of left lung, especially lower lobe. About a quart of blood was found in the abdominal cavity. The pneumonia was attributed to the ether.

H. L. K. SHAW.

Editorial

The Use of Proper Names in Medicine.

The inconvenient and unscientific habit of labelling each new disease and new symptom with the name of its discoverer has recently been commented on by the *Philadelphia Medical Journal*. It is once more forcibly brought to mind by an article in the last number of the *Archives de Médecine Experimentale*. This article is headed "Curable Gangrene of the Lungs of Lasègue," and has a sub-heading "A Variety of Gangrene of the Lung Depending on the Modification of the Dilated Extremities of the Bronchi of Briquet." One is tempted to ask who Lasègue and Briquet were, and what excuse there was for tacking their names on to gangrene of the lung. We imagine that this labelling process is due to several reasons. One is that the sister sciences honor discoverers in a similar manner; another is that grateful pupils have chosen this method of honoring their masters and perpetuating their names. Many other possibilities of origin exist. One fact for which we may be devoutly thankful is that in most instances these remarkable men have had remarkable names. It would have been distressing if we had had five or six Smith's diseases, or had had to remember that P. Q. Jones' disease was a warty affection of the feet, whilst S. K. Jones' was impacted ear wax. As it is, the unfortunate student of medicine, who is already overburdened with work, is compelled to memorize a series of names, some of which are doubtless those of eminent men, but others those of individuals whose only claim on posterity is their association with some minor symptom or ailment. Let us by all means call a halt on this eponymic over enthusiasm.

Concerning Photo-Therapy.

The curative action of sunlight in such general conditions as phthisis, and convalescence from acute disease, has been recognized from the time of the ancients. Its use as a local therapeutic agent is apparently new. We use the word apparently advisedly, for as a recent writer has said: "The new discoveries in medicine are the things which have been forgotten."

A good many years ago we remember reading a number of articles on the local therapeutics of the solar rays by Thayer, of San Francisco, and more recently Abrams, of the same place, has again called attention to this form of treatment. It has remained for Finsen and Bie (*Philadelphia Medical Journal*, 7 October, 1899), Danish observers, to put the matter on a scientific footing. The earlier operators simply focused the sun's rays by means of a lens on the part to be treated. Finsen has shown that all the constituent parts of the rays do not act equally, but that the blue, violet and ultra-violet rays have most bactericidal power. By means of an ingenious apparatus he has been able to concentrate these rays, and has already used them therapeutically on a large number of cases of lupus vulgaris, and a smaller number of lupus erythematosus and alopecia areata. His success with the first disease seems phenomenal, the photographs illustrating the cases being especially striking. His success with lupus erythematosus is less marked, that with alopecia areata is very encouraging. With regard to lupus vulgaris at any rate, it would seem that a new and powerful therapeutic agent had been discovered.

Scientific Review

The Relation of Trauma to Tuberculosis.—The relation of trauma to tuberculosis can be looked at from several points of view, but for purposes of clearness it may be considered under two heads: 1. The relation of accidental injuries to tuberculosis, and 2. The relation of surgical intervention in local tuberculosis to the generalization of the disease.

The effects of accidental injuries to various parts of the body and their relation to tuberculous lesions is of interest both to the physician and the surgeon. We find that as a rule certain portions of the body are more apt to become the seats of accident tuberculosis than others, and the lungs, meninges, and joints seem to be the most susceptible regions.

Carefully observed cases of pulmonary or pleural tuberculosis following injury are not common, though there are several quite convincing cases on record. Chauffard has very

carefully described three cases of tuberculous pleurisy following accident, and in at least two of these the proof of the tuberculous nature of the affection cannot be doubted. The following is a brief summary of one case. A middle aged man fell, striking the right side, particularly the chest wall. Ten days later he was taken with chill, pain in the injured side, fever, and dyspnœa. On his entrance to the hospital he presented the signs of right sided pleurisy with effusion, and on aspiration 1500 c. c. of fluid was withdrawn. There was no return of the effusion and the patient recovered. A guinea pig inoculated with the fluid developed tuberculosis, and died from it. Chauffard's second case had a similar history, though in this case there was actual fracture of the ribs, and the symptoms did not develop until seventeen days after the injury.

Cases of pulmonary tuberculosis following trauma seem to be as rare as cases of pleural involvement. Stern, in his monograph on the traumatic causation of internal diseases only recognizes two authentic cases, though some have been reported since.

Schrader reports the case of a boy who was struck by a wagon and injured on the right side of the chest. He was unconscious for fifteen minutes. The next day he had fever, headache, and general malaise, was short of breath, and somewhat cyanotic. Physical examination showed dullness over the lower two lobes on the right side, and a diagnosis of pneumonia was made. Later he developed an irregular fever, and tubercle bacilli were found in his sputum; he became very emaciated but subsequently recovered. Harris reports a very similar case where an apparently typical lobar pneumonia followed an injury to the chest, the case came to autopsy, the affected lung showing many recent cavities, and several old quiescent foci of tuberculosis. The opposite lung was studded with fresh tubercles.

The question of interest in all these cases lies in the point of entrance of the tubercle bacillus. In Harris' case it seems extremely probable that the infecting bacilli came from the old quiescent foci which were started up into activity by the injury, the pneumonic lung offering a point of lessened resistance. It is likely that similar old lesions may have

existed in the case of Schrader, and in Chauffard's cases of tuberculous pleurisy, though as all these cases recovered it is of course impossible to say. Such an explanation is rendered probable by the fact that healed or quiescent tuberculosis of the lungs is so often found at autopsy, and indeed it is not so very uncommon to find fresh tuberculous lesions which have almost certainly sprung from the breaking down of old foci. In some of Chauffard's cases it is expressly stated that the lungs seemed normal, and he suggests that the bacilli came from the nasal or pharyngeal cavities, where it is known from the work of Straus and others that bacilli may be present even in perfectly healthy people.

With regard to the occurrence of tuberculous meningitis following injury to the head, a number of interesting observations are to be found in the literature, reported by Buol and Paulus, Schilling, Potain and others. Schilling's case is a characteristic example of this form of disease. A boy fell down a cellar and struck his head, and was unconscious for two days. Eleven days after the accident he developed marked meningeal symptoms and died in ten weeks after the injury, the disease taking a chronic course. The autopsy showed tuberculous meningitis and caseated tracheal lymph glands. No other tuberculous lesions. The history of most of these cases is similar to that just quoted, and where autopsies are made there is practically always some old lesion besides the fresh meningitis. The case of Buol and Paulus is an exception to this rule, no old tuberculous lesion having been discovered, though the patient had a history of having had left sided apex involvement a year or two before. The explanation generally given to account for the occurrence of the meningitis in these cases, is that the injury produces a point of lessened resistance, and at the same time sets free bacilli from the old focus which is practically always present.

Regarding traumatic joint tuberculosis not much need be said, this being such a well recognized form. Probably a fair proportion of the cases of joint tuberculosis give a clear history of trauma. The works of Gibney in this country, and Cheyne in England speak of the relative frequency of cases of this kind, and many such are reported in the French and German literature.

The relation of surgical intervention in local tuberculosis to the generalization of the disease is an important question to be considered when operating on local tubercular foci of any kind. Koenig, the celebrated German surgeon, seems to have been the first to call attention to the fact that operations on local tuberculous lesions were apt to be followed by general tuberculosis. Verneuil has collected a large number of such cases from the practice of himself and his colleagues. These may be divided into three groups: 1. Cases where a preexisting internal lesion has been much aggravated by a local operation. 2. Cases where an operation caused the sudden appearance of local lesions where none had been previously apparent. 3. Cases where an operation was followed by acute miliary tuberculosis. The operations in question usually consisted in the excision of local tuberculous foci, sometimes merely the curetting of the focus, and in a few instances the mere forcible straightening of an ankylosed tuberculous joint. Cases where a preexisting pulmonary tuberculosis has become aggravated as a result of operation are not uncommon. Verneuil reports two cases of this kind, one in which an operation on the shoulder joint was followed by an exacerbation in the lung symptoms, and a similar result following an amputation of the thigh for a tuberculous knee. Localized lesions, particularly meningitis, as a direct result of operation are reported by Prengreuber, Kirmisson, Poncet, Lucas-Champonniere, Verneuil and others. The local lesions extirpated varied in character. Eilers reports six cases where tuberculous meningitis followed chiselling the temporal bone for tuberculous caries. Demars reports several cases where excision of a tuberculous testicle was followed by meningitis, and cases where removal of the glands of the neck or even mere straightening of deformed limbs was followed by pulmonary tuberculosis or meningitis have been observed by Poncet, Szuman and others. In all these cases the symptoms appeared a few days after the operation, and in most of them the clinical diagnosis was confirmed by autopsy. These cases presumably result from the introduction of bacilli into the circulation from the operative procedure, and some writers claim that this is particularly apt to occur where the operation is incomplete or in the form of

cureting. The number of cases in which generalization is apt to take place after operation varies according to different authors. In 260 suppurating cases operated on by Marsh there were 16 deaths from tubercular meningitis, a mortality of 6.15 per cent. Croft gives the mortality from generalization at 4.4 per cent, and Wright at only 1 per cent. Verneuil considers that generalization occurs in 2 per cent. of the cases. Koenig's statistics show a little over 1 per cent. Duobtless all these statistics are somewhat high, as some of the cases of post-operative generalization must be merely coincidences and not due to the operation; indeed the history of some of the cases leads one to believe that the generalization was beginning at the time of the operation. The whole question is carefully summed up in the Report to the Belgian Surgical Society made by Depage and Gallet. They conclude that we have no way of telling beforehand in what cases generalization is apt to take place, and that it occurs in so few cases that it may almost be disregarded.

Lambotte, in the discussion of their paper, laid down three rules for intervention in surgical tuberculosis. 1. Traumatise as little as possible. 2. Employ sharp instruments. 3. Curette only when absolutely necessary.

In conclusion it may be said that traumatism, though acting as an important factor in some forms of tuberculosis, does so merely by predisposing the part to the attacks of the tubercle bacillus and by creating a locus minoris resistentiæ. The number of such cases in which trauma so acts is probably very small as is shown both by clinical experience and the recent experimental work of Lannelongue and Achard.

GEORGE BLUMER.

Medical News

Edited by H. Judson Lipes, M. D.

ALBANY MEDICAL COLLEGE.—The sixty-ninth session of the Albany Medical College was opened September 26, 1899, at 12 M., by the introductory lecture delivered by Professor S. R. Morrow, M. D., in the amphitheatre of the college. The members of the faculty were all present excepting Dr. Vander Veer, who had not yet returned from Europe. President Andrew V. V. Raymond, of Union University, was present and welcomed the students in the name of the University. The outlook is

most encouraging as the freshmen class is very large. Students have entered into the work with more enthusiasm than usual perhaps, and with the advantages of the new hospital, better work may be expected.

THE CONNECTICUT ALUMNI ASSOCIATION OF THE ALBANY MEDICAL COLLEGE.—On September 25, 1899, the alumni of the Albany Medical College, resident in Connecticut, met at Dr. Crothers' Sanitarium at Hartford. The meeting was well attended and considerable interest was manifested, and it is hoped that next year a tri-state association may be formed to include the alumni of Massachusetts and Rhode Island. Dr. Crothers, as president, gave the address of the day. The secretary, Dr. W. G. Murphy, of East Hartford, read a very interesting letter of regret from Dr. Rial Strickland, of Thomsonville, the oldest living graduate of the Albany Medical College, class of 1839. Other letters expressing great interest and sympathy in the association, with regrets at inability to be present, were read. Very interesting remarks were made by Drs. Abrams, O'Flaherty, Ensign, Homes, Snow, Murphy and others.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—The semi-annual meeting of the Medical Society of the County of Albany, was held Tuesday evening, October 10, 1899, at 8:30 o'clock, in Alumni Hall. The regular order of business was carried out. The name of Dr. Travers was submitted for membership and referred to the board of censors. The resignation of the secretary, Dr. H. S. Pearse, was accepted with regret. Dr. George Blumer was unanimously chosen to fill the vacancy. The vice-president, Dr. James W. Wiltsie, then read his address on "The Etiology and Treatment of Tuberculosis in Children." The paper was discussed by Drs. Hun, Blumer and Theisen. The second regular meeting will be held in Alumni Hall, November 15, 1899, at 8:30 P. M. The following papers will be presented: "A Report of a case of Round Ulcer of the Stomach, with Presentation of Post-mortem Specimen," by Dr. J. L. Archambault, of Cohoes. By invitation, Dr. John Bruce Harvie, of Troy, N. Y., will give the "Report of a case of Total Gastrectomy, Recovery and Presentation of Specimen and Patient."

CLINICAL LECTURES ON DISEASES OF THE SKIN.—On Wednesday afternoons, commencing November 1, 1899, at 4:15 o'clock, Dr. L. Duncan Bulkley, of New York, will give a series of clinical lectures on diseases of the skin in the Outpatient Hall of the New York Skin and Cancer Hospital, corner Nineteen street and Second avenue. The course will be free to the medical profession. Dr. Bulkley gave a similar course last year and it was very largely attended and much interest manifested.

MEDICAL ASSOCIATION OF NORTHERN NEW YORK.—The twenty-ninth annual meeting of the Medical Association of Northern New York was held at Ogdensburg, October 10, 1899. The annual address was delivered by the president, Dr. Pease, of Norwood. Dr. S. E. Brown, of Ogdensburg, read a paper on "Backward Displacements of the Uterus, their Significance and Treatment." Dr. S. W. Dodge, of Massena, "Traumatic Injury of the Spine." Other papers were read by Drs. G. C. Madill, of Ogdensburg; C. D. Selver, of Chateaugay, and F. D. Crocker, of North

Lawrence. The following officers for the ensuing year were elected: Dr. Mills, of Chateaugay, president; Dr. George H. Dowsey, of Madrid, vice-president; Dr. Wilding, of Malone, secretary; Dr. Oline, of Malone, treasurer. The matter of the establishment by the State of New York of a sanitarium in the Adirondacks for tuberculosis patients was formally discussed. Dr. J. H. Brownlow, of Ogdensburg, took an animated part in the discussion, opposing the project, and at its close was so overcome that he retired to his home, where he died within an hour from angina pectoris. The association at once adjourned out of respect, to meet in Norwood in 1900.

RECENT COLLEGE APPOINTMENTS.—Dr. John G. Clark, formerly of Johns Hopkins University, has been appointed professor of gynecology in the University of Pennsylvania, to succeed Dr. Charles B. Penrose, who resigned at the close of the last term.

Dr. C. B. Davenport, of Hartford, has accepted the professorship in embryology in the Department of Zoology at the University of Chicago, which was made vacant by the resignation of Professor William Morton Wheeler, who has gone to the University of Texas.

CONSUMPTIVES IN CALIFORNIA.—On September 14th the California State Board of Health passed a resolution declaring that plans should be considered for establishing a quarantine against human beings and domestic animals with tuberculosis entering the state. Dr. D. D. Crowley, in introducing the resolution, declared that statistics show tuberculosis to be spreading rapidly among native-born Californians. He referred to the constant danger from the large number of consumptives who seek Southern California for their health, and declared that the protection of the state's inhabitants is of more value than the cure of a small percentage of invalids, this radical measure of absolute exclusion of all consumptives was fortunately greatly modified, the Board has decided not to quarantine against the consumptives of other states but has adopted a resolution recommending that in all State institutions those afflicted with tuberculosis be separated from the other inmates.

FEMALE ARMY NURSES WANTED.—Army nurses are in great demand; they must be graduates of regular training schools. When assigned to duty in this country they receive \$40 a month and when assigned to duty elsewhere \$50 a month, besides their living and traveling expenses and a yearly thirty days' furlough. There is a chief nurse for each hospital whose pay depends upon the number of nurses under her. If less than ten she gets \$10 a month extra; if more than ten \$25 a month extra. A new hospital is building at Manila which will be the largest army hospital owned by the United States. It will accommodate 2,000 persons. At present the hospital at Manila is in charge of Surgeon-General Woodhull. Our next largest hospital is at Presidio at San Francisco, which will accommodate 1,000 persons.

A PRIZE FOR AN ESSAY ON TUBERCULOSIS.—A prize of a thousand dollars was offered by the Tuberculosis Congress recently held at Berlin for the

best essay on the subject "Tuberculosis in the Community and Its Prevention." The essay must be written in a popular manner. If two authors are equally successful the prize will be divided between them. Competitors must submit their manuscript before December 4, 1899, to Professor B. Frankel, Berlin, Bellevuestrasse 4. The essay must be signed with a fictitious name and the real name and address of the writer be enclosed in a separate envelope.

DR. ELLIS' BEQUEST TO THE HARVARD MEDICAL SCHOOL.—It is announced that Dr. Galvin Ellis, Harvard class of '46, who died in 1883, and whose will has just been probated, left to Harvard University \$140,000. Most of this sum is to be devoted to the education of his descendants, and also to the maintaining of three professors of the Medical School.

BOWDOIN'S CLINICAL WORK AT PORTLAND.—Of special interest, because it is the second important medical school that is to have its theoretic and its practical teaching in different places, is the following announcement from the faculty of Bowdoin Medical College: The medical students of Bowdoin College will receive instructions during their last year at Portland, where suitable buildings are now being erected, and where they will have improved clinical facilities. After 1900 the course will be four years in length, the first two years being spent at Brunswick and the second two years at Portland.

THE LOOMIS SANITARIUM BURNED.—The Loomis Memorial, or Administration Building, a gift of Mr. J. Pierpont Morgan to the Loomis Sanitarium at Liberty, Sullivan County, New York, was entirely destroyed by fire on October 14th. The loss is from \$75,000 to \$100,000; the insurance but \$50,000. There were 100 inmates, all of whom were removed safely. The fire is supposed to have originated from the explosion of an alcohol lamp.

THE YELLOW FEVER SITUATION.—The cold weather at the beginning of two weeks ago seemingly destroyed to a large extent the contagiousness of the germs of the disease. No new cases have recently been reported in New Orleans, although one death occurred on September 14th. In Key West, while the improvement was not so radical as in the Mississippi region because the cold had not been so noticeable, there was a marked falling off in the incidence of the disease. The cases reported in the last three weeks of October were all of a mild, non-fatal character. It is announced that Spain has quarantined against New Orleans. This is unfortunate now that the epidemic is practically over. Santiago de Cuba had been remarkably free from yellow fever for some time until the disease was imported from Havana.

THE PLAGUE SITUATION.—Unfortunately we do not hear the same encouraging reports from the plague-stricken districts. Fresh cases continue to occur at Oporto in Portugal. Soldiers engaged in duty with the military cordon have developed plague. During September there were seventeen cases of plague in Oporto with four deaths. There is no news of plague in any other part of the Peninsula. There are persistent rumors that cases have occurred and are occurring in France, but evidently without

foundation. On October 14th a case of plague was discovered at Plymouth, England, on board a vessel which had just arrived from Bombay. In September it was announced in Alexandria that the plague had disappeared, but on the 24th of the same month several new cases were reported. The situation in India is decidedly improved and would look very hopeful but for the fact that among the new cases being reported each day there is usually one or more among the white population.

THE DEATHS OF EMINENT MEDICAL MEN.—Professor Charles Stoerk, the well-known laryngologist, died on Sunday, September 14th, at Hietzing, near Vienna, in his sixty-seventh year. He was a pioneer of much modern laryngology and the author of treatises on the use of the laryngoscope published a quarter of a century ago.

Dr. Jules Simon, physician to the Hôpital des Enfants Malades, Paris, died recently from heart disease following influenza. He was recognized as one of the foremost living authorities on diseases of children.

Dr. Robert B. Crinice of Philadelphia, died suddenly on September 14th, in the arms of a patient, whom he was visiting professionally. He graduated from the University of Pennsylvania in 1859, and in 1861 entered the army as assistant-surgeon, attached to the Thirty-eighth Pennsylvania Volunteers. He was a well-known surgeon and a Fellow of the College of Physicians.

Dr. George A. Hendricks, Professor of Anatomy in the University of Minnesota, died at Minneapolis on September 25th. He was formerly connected with the University of Michigan, where he introduced the graded course in anatomy, of which he was the originator.

PERSONAL.—MARRIED: STANWIX—BELL—At Albany, N. Y., October 4th, 1899, Dr. George Burch Stanwix (A. M. C. '98), formerly of Albany, and Miss Jessie Bell, daughter of Mr. and Mrs. Horace S. Bell, also of this city. Dr. and Mrs. Stanwix will reside at Saugerties.

VAN BEUSEKOM—GREEN—At Ravena, N. Y., September 30, 1899, Dr. Richard Van Beusekom (A. M. C. '97), of Coeymans, and Miss Harriette E. Green, of Ravena. Dr. and Mrs. Van Beusekom will reside in Coeymans.

BRISTOL—WOOLEY—At Albany, N. Y., September 20, 1899, Dr. William S. Bristol, of Albany, and Miss Cora Benton Wooley.

GEORGE—HAPPEL—At Albany, N. Y., October 19, 1899, Dr. W. H. George (A. M. C. '95), and Miss Minnie Happel, a sister of Dr. W. H. Happel, all of this city.

McMULLEN—BARTLETT—At All Saints' Cathedral, Albany, N. Y., October 18, 1899, Dr. Charles Goul McMullen (A. M. C. '98), of Schenectady, and Miss Fredericka Bartlett, daughter of Dr. Bartlett, of Plymouth, Devonshire, England. Dr. and Mrs. McMullen will reside in Schenectady.

BATTIN—CALLANAN—At Slingerlands, N. Y., October 19, 1899, Dr. Harry E. Battin (A. M. C. '97), of Watervliet, and Miss Helen Callanan, of Slingerlands. Dr. and Mrs. Battin will reside at Schenectady after an extended trip through the east and northeast.

Current Medical Literature

SURGERY

Edited by A. Vander Veer, M. D.

Pulmonary Surgery, and the Diagnosis of Pleural Adhesions.—M. K. SAPIEZKO, (*Revue de Chirurgie*, July, 1899.) The writer finds the chief reasons for the lack of success in pulmonary surgery to be: 1. The difficulties of diagnosis. 2. The inability to determine the existence and situation of pleural adhesions. 3. The inability to produce artificial pleural adhesions. In some cases an exploratory pleurotomy can be performed with comparatively little danger, but to open an infected area in the lung except through pleural adhesions is a dangerous procedure. The writer emphasizes the necessity for the most careful and thorough physical examination in order that the diseased focus may be as definitely located as possible. To determine the existence of pleural adhesions he uses an apparatus devised by himself. This consists of a glass tube bent into a U shape, which he uses as a manometer. This is filled with sterilized normal salt solution. To one end is attached a short rubber tube fitted with a needle, preferably blunt, so that it will not penetrate the lung readily. If this needle is inserted into the pleural cavity where there are no adhesions, the negative pressure in the pleural cavity causes a rise in the proximal side of the manometer. If on the other hand pleural adhesions exist there is practically no change in the level of the fluid in the manometer. In this manner the writer believes that the existence of pleural adhesions can be definitely determined.

To determine still more definitely the location of the diseased focus, exploratory aspiration of the lung is performed at the site of the pleural adhesions.

The pulmonary conditions especially amenable to surgical treatment are abscess, gangrene, bronchiectasis and tuberculosis cavities and in the great majority of these the writer believes that pleural adhesions exist. The surgical treatment of these conditions the writer considers to be but slightly more difficult than that of abscesses of other parts of the body.

Resection of one or two ribs, incision of the pleura and the lung down to the diseased focus, followed by drainage is the operative procedure advised.

The writer reports two cases of pulmonary gangrene, two cases of pulmonary abscess, one case of tuberculous cavity, one case of bronchiectasis and one case of subphrenic abscess, all treated in this manner, with complete recovery.

Gangrene of the Lung.—A. H. LEVINGS, (*N. Y. Med. Jour.*, Oct. 14, 1899), advocates surgical interference in circumscribed gangrene of the lung, and reports two cases. He urges the following points:

1. All cases of pulmonary gangrene which are progressive and not absolutely diffuse should be operated upon.
2. The gangrenous area should be localized by physical examination, aided by the use of the aspirating needle, and, if necessary, by multiple resection of the ribs.
3. In the absence of pleuritic adhesions, the general pleural cavity should be shut off either by a guaze packing or by a row of sutures.
4. After thorough opening and free drainage of the gangrenous cavity it should be daily cleansed by gentle irrigation.
5. The cavity should be tightly packed with iodoform gauze.

The Remote Results of Gastro-Enterostomy.—HENRI HARTMANN and MAURICE SOUGAULT. (*Revue de Chirurgie, February, 1899.*) The writer first considers the general results of gastro-enterostomy. The most marked feature is the disappearance or alleviation of the subjective disorder. It is only in very rare instances that the general condition as well as the gastric symptoms are not greatly improved. Some cases of so-called dyspepsia in which there is much pain and discomfort coming on sometimes after meals, but with no stenosis, appear to be much benefited by gastro-enterostomy. Individuals with benign stenosis of the pylorus are greatly benefitted by gastro-enterostomy, and following the operation there is a disappearance of gastric symptoms and anæmia and a marked gain in weight.

In cases of cancerous stenosis of the pylorus there is usually more or less temporary improvement following the operation, and the result on the whole is extremely satisfactory. From their own cases as well as other published statistics the average duration of life after gastro-enterostomy for cancerous stenosis of the pylorus is about seven months. They next consider the functional and chemical condition of the stomach after gastro-enterostomy. The capacity of the stomach is, as a rule, much diminished after the operation. The rapidity with which a dilated stomach regains its normal size seems to depend upon whether the stenosis developed rapidly or slowly. If rapidly, then the reduction in size of the stomach is rapid. If slowly, then the reduction in size is slow and sometimes the dimensions of the organ may be but slightly diminished after operation. This seems to be due to a loss of tone in the stomach in which the stenosis and dilatation have developed very slowly. In short, the variations in the dimensions of the stomach after gastro-enterostomy are directly connected with the condition of the musculature of the stomach before operation. As a rule there is perfect continuance of the new orifice body from stomach to intestine, but there is not, as some have stated, an hypertrophy of muscle about the orifice. As a rule there is great improvement in the motor functions of the stomach, after operation, but not a complete return to the normal, due doubtless to an atony of the musculature. To in part obviate this difficulty, anastomosis should be performed at the most dependent portion of the stomach. The gastric secretion is usually avoidably modified after operation, depending largely on the condition of the glands in the

stomach mucosa. There is usually a fall in the total acidity, as well as in the pepsin. This is supposed to be due to the fact that the stomach glands are no longer excited by the irritant products as they were before operation.

The regurgitation of bile into the stomach is of very frequent occurrence after gastro-enterostomy. The writers have never seen a case in which it did not occur. The various methods of gastro-entrostomy practiced to obviate this difficulty do not appear to have succeeded in doing so. The regurgitation of bile is intermittent. The presence of bile in the stomach is not as was once supposed, a dangerous condition, and it would appear that it exerted but little effect upon gastric digestion. Experiments have very frequently produced an anastomosis between the gall bladder and stomach of dogs without its producing any appreciable effect upon the animal's nutrition. This operation has been performed upon man in cases where there was complete obstruction of the common duct, with excellent results. In one such case which came under the writer's observation gastric digestion was in no way interfered with, nor were there any unpleasant gastric symptoms.

Appendicitis Larvata.—C. A. EWALD (*Archiv. für klin. Chir.*, Bd. LX. Hft. I.) Under this heading the writer classifies certain cases of appendicitis of an exceedingly chronic character, and with symptoms that lead one to think of diseases of other organs than the appendix. Stomach or intestinal symptoms are the usual causes which bring these patients to a physician. These symptoms are in no way confined to the ileocæcal region. Oftentimes there is more or less distress associated with the taking of food, or there may be general abdominal pains and distress. In other cases there may be irregular defecation, with more or less pain and tenesmus. There is usually nothing in the history of these patients that points to an old appendicitis, although there may have occasionally been pain in the ileocæcal region. These patients are often treated for a long time for gastro-intestinal catarrh without any improvement, and then come to be considered as neurasthenics. As a result of his observations the writer concludes that in a number of these cases there is a chronic appendicitis which he calls appendicitis larvata. The diagnosis can usually be made only after more or less extended observations and repeated careful examinations; this usually detects a distinct tenderness or palpation of the ileocæcal region, and very often one can feel an enlarged appendix—the size of the thumb or larger—and palpation of this usually causes marked pain. Operation and removal of the appendix invariably affords these patients marked relief. That the condition is not a nervousness, but that the nervousness is the result of the appendicitis is proven by the fact that the appendix is found to be more or less abnormal, usually swollen and infiltrated, and not infrequently with chronic ulcerations of the mucosa, or more or less marked adhesions, quite sufficient to explain the pain and discomfort.

MEDICINE

Edited by Samuel B. Ward, M. D.

Influence of Fatigue and Repose upon the Temperature of Tuberculosis.—DAREMBERG and CHUQUET. (*Revue de Médecine*, 1899.) The object of the article is to prove that many physiological influences, fatigue of all kinds, indigestion, menstruation, etc., produce very delicate thermic reactions, sufficiently marked however to be applicable and to form an important diagnostic sign. The tuberculous patient is in a constant state of thermic instability, and carefully observed, this instability can be used to make an early diagnosis.

The authors report several cases in which these observations have been of great practical value.

Their method is to have the patient walk for about an hour in the afternoon and to take the temperature before and a short time after the walk. If tuberculosis exists in a more or less active state, the temperature will be found to be from $.3^{\circ}$ to 1° C. higher after the walk than before. These observations are made for several successive days, and if this rise of temperature is found to occur constantly after the walk, the diagnosis of tuberculosis can be made.

With this method the writers have been able to make a diagnosis of tuberculosis at a time when the physical signs were very uncertain, when there was no fever and no cough or expectoration.

They report two very interesting cases, both young women, and both with the same general symptoms and with very indefinite signs at one apex of the lung. Both were supposed to have early tuberculosis, although there was no cough and no expectoration.

In the one case the temperature was increased from $.7^{\circ}$ to 1.1° C. by the afternoon walk, while the other was practically the same before and after the walk. In the latter case a diagnosis of chlorosis was made and patient was given iron with complete recovery.

The writers consider a rise of temperature at the menstrual period of diagnostic value in tuberculosis.

The use of this method has also been of value in determining whether a tuberculosis focus in the lungs had become quiescent or not, i. e., whether or not the patient could be considered cured.

The Prevention of Tuberculosis.—In a paper entitled "The Struggle against Tuberculosis," (*Boston Med. and Surg. Journ.*, 21 Sept., 1899,) E. G. OTIS outlines the following plan for the prevention of tuberculosis in large cities:

1. Knowledge of all cases of tuberculosis and their habitat, and the power to control and supervise them; this knowledge to be obtained either by including consumption among the infectious and communicable diseases and requiring notification as with them, or by urging physicians through circulars from the board of health, frequently repeated, to report all cases coming within their observation, especially among the poor, or wherever there is doubt as to the proper disposal of the sputum.

2. Instruction of the public as to the dangers of tuberculosis, and their avoidance by circulars similar to those issued by the Pennsylvania Society for the Prevention of Tuberculosis.

3. Compulsory disinfection or renovation of premises occupied by a consumptive, or in which a consumptive has died, before they can again be let or occupied.

4. Hospital accommodations in especial buildings for poor consumptives and those of limited means, situated in or near the city, and receiving free all stages of the disease alike. Two such institutions with a capacity of 150 beds each, or three of 100 beds, would probably afford accommodation for 900 cases annually on the basis of an average residence of four months.

5. One or more sanatoria proper in the country for the open-air treatment, not more than two or three hours distant from the city, where the incipient cases and those likely to be benefited by such treatment can be transferred from the city institutions.

6. Free examination of sputum for tubercle bacilli.

7. Regulations against spitting in public halls, conveyances and upon the sidewalks, such as are already in force in the street car system, and, in addition, the placing of spittoons in halls, waiting rooms, and possibly street cars.

8. The establishment of out-patient clinics so that the consumptive cases can be segregated, and receive more detailed attention and instruction for themselves and friends as to how they may avoid communicating the disease.

9. Control of the city milk supply, by requiring all dealers to furnish satisfactory evidence that the cows from which their milk is obtained have been found free by the tuberculin test, which test is to be repeated at stated intervals.

10. Inspection of animals slaughtered for food, and all meat sent into the city. Possibly compulsory disinfection of old clothes in pawnshops.

Family Albuminuria.—PAUL LOWDE (*Archiv. Generale de Médecine, Sept., 1899*). The writer defines a family disease as one which without change of form attacks several members of the same generation. The symptoms of this affliction are: 1. Renal—Intermittent Albuminuria; generally absent after a night's rest, and appearing after a meal or exercise; rarely more than 1 grain in 24 hours. Chemical analysis of the urine shows decreased oxydation as well as decreased irritation; no casts. 2. Gastric—Indigestion of different forms. 3. Hepatic—Light Jaundice. 4. Intestinal—Often constipation. 5. Nervous system—Headache, depression, inaptitude for work, instability. 6. General condition—Anæmic; follicular tonsilitis and erythematous angina are frequent complications; onset insidious; the course is marked by remissions and recrudescences, usually ends in recovery, though it is possible that it may give rise later on to Bright's disease.

The predisposing cause is the so-called neuro-arthritic diathesis. Adolescence is the most favorable age for the development of the disease, at a

time when great demands are made upon the organism, and the disease is the manifestation of a certain form of degeneration. We should examine the urine voided on arising in the morning, that voided two hours after breakfast and that voided after exercise. The writer believes that under this heading of intermittent family albuminuria can be collected, 1. The postural albuminuria of Stirling; 2. Cyclic albuminuria of young people; 3. Digestive albuminuria of Robin; 4. Physiological albuminuria of the growing age of Gull, and 5. The Chloro-Brightism of Dieulafoy. The writer believes heredity to play the chief role in the pathogenicity. Treatment should be general and symptomatic, and with a view to increasing oxydation.

E.

Experimental Researches on the Thyroid.—FRANCESCO FRANCESCHI (*Gaz. d. Ospedal. d. Clin.*): There are two theories concerning the function of the thyroid accepted at present. The one theory claims that the gland has the power to neutralize certain unknown toxic products manufactured physiologically in the organism; the other that the gland secretes a substance necessary to the general nutrition. Neither view has yet been proved. The author's experiments were made with a view to testing the truth of the former theory. The poison employed was the diphtheria toxin; the animal was the dog. The experiments were made with proper antiseptic precautions, and with the exclusion of possible errors due to collateral circulation.

The results were as follows: 30 experiments, 17 being injections into the thyroid, 13 into the jugular. Under a dose of 0.15 per kilogramme of weight, both the animal subjected to injection of the thyroid and that subjected to injection into the general circulation, died in from two to three days. Under a dose of 0.05 per kilogramme, both classes—5 thyroids, 4 general—died in three days. The animals suffering injection of the thyroid, however, lived a few hours the longer. Under a dose of 0.03 per kilogramme, two survived thyroid injection, one died after 31 days, the others after 6½ days. The eight dogs subjected to a jugular injection perished in six days.

The writer promises some further experiments with still more diminished doses, admitting that in view of the slight apparent antitoxic power of the gland in these experiments, they were not sufficient in number and diversity to be final.

W. H. H.

The Hematozoon of Beri-Beri.—FAJARDO in the *Centralblatt für Bacteriologie* of October 28, 1898, describes a new protozoan organism which he believes to be the cause of beri-beri. He mentions the similarity that exists between some forms of this disease and malaria, and speaks of the large number of authors who have had good opportunity for observing cases of the disease, and who have supposed a similar origin for it and malaria. The organism which Fajardo describes were studied in a large number of cases occurring in Brazil. The parasites were to be found both in the circulating blood, and also in the internal organs. They are described as very small amœboid bodies, at first hyaline, later developing

a few very small pigment granules. Occasionally besides these pigmented and non-pigmented forms there were to be seen peculiar long spindle shaped forms. The organisms in the blood were found both within and outside of the red corpuscles. The pigment on microchemical examination sometimes gave an iron reaction. The organisms multiplied by a process of sporulation. The author believes that the phases of development of this organism are essentially the same as those already described for the malarial organism.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Tuberculosis in Childhood.—GEORGE F. STILL (*Pediatrics*, Oct. 15, 1899,) reaches the following conclusions as a summary of observations on the morbid anatomy of tuberculosis in childhood :

1. The commonest channel of infection with tuberculosis in childhood is through the lung.
2. Infection through the intestine is less common in infancy than in later childhood.
3. Milk, therefore, is not the usual source of tuberculosis in infancy, perhaps owing to the precautions taken in boiling, sterilizing, etc.
4. Inhalation is much the commonest mode of infection in the tuberculosis of childhood, and especially in infancy.
5. The overcrowding of the poorer population in the large towns is probably responsible for much of the tuberculosis of childhood, and prophylaxis must be directed to the prevention of this overcrowding, the improvement of ventilation, and the inculcation of the extreme importance of fresh air during the earliest years of life.

Clinical Observations in Chlorosis of Children.—BY TSCHERNOFF (*Jahr. f. Kinderheilkunde*, 1897.) Chlorosis, it is said, has been attributed to the functional disturbances of the stomach or intestines. The author proposes to clear up by his observations the question of the relation of intestinal fermentations to the chlorosis of infancy—which has not received much attention heretofore. In his observations, the amount of haemoglobin was relatively diminished more than the number of red blood cells, and he concluded from the result of his researches that the chlorotic modifications of the blood might follow from various causes, especially diarrhoea and the process of putrefaction in the intestine. The concomitant maladies of the parenchymatous organs aggravated the chlorosis and retarded recovery. The toxic products, which have a pernicious action on the blood and produce the lesion of chlorosis, are carried by this means to the various glands which are affected and, as he has observed, become hypertrophied. But the author seems to have often confounded true chlorosis with infantile anæmias and among others treats of the condition of a rachitic child more as an anæmia than as a true chlorosis.

Icterus Neonatorum from the Anatomical and Clinical Sides.—By B. WERMEL, (*Revue der russischen medic. Zeitschriften*, 1898, No. 7.) AS

the result of a careful anatomical research Wermel made the following assertions: Since in foetal life the liver begins its functional activity, it is easy to understand that bile will be secreted early. If the birth is a normal one the bile will be emptied speedily into the intestine; while under opposite conditions, for instance when the circulation is partially interrupted or the respiration difficult, a venous hyperæmia occurs in the liver and at the same time a biliary stasis which is increased after the first nursings by the increased formation of bile. Therefore icterus neonatorum is simply stasis icterus.

In the urine one finds the bile pigments as well as the biliary acids although in small amounts, since the quantity depends upon the amount of bile circulating in the blood and because a part of the pigments will remain behind in the kidneys (often causing the bilirubin-infarcts.) Since the stools are not colorless it shows that a part of the bile passes into the intestine, although at first the stools might be colored by the meconium, the absence of an icteric discoloration of the liver is due to the fact that this discoloration can not be maintained on account of the great blood capacity of the liver. On microscopical examination one is always able to note the bile pigments in the liver cells.

As to the predisposing causes of this condition of icterus, Wermel found the following:

1. Duration of the birth. When less than six hours duration the affection was found only in 19½% of the cases; where it lasted from six to twelve hours, 52%; longer than thirty hours, 74%.

2. In twenty cases of severe hæmorrhage during labor or of very severe labor pains, fifteen cases of icterus appeared.

3. In breech presentations icterus occurred in 95½%, in forceps deliveries in 78%, in versions (four cases) 100%.

In primiparæ children are more often icteric than those of multiparæ, the age of foetus is important since the less it is developed the more frequently is icterus present.

In forty-two cases of asphyxia forty-one had icterus.

NEUROLOGY

Edited by Henry Hun, M. D.

Brain Tumor with Disorder of the Sense of Smell.—W. SIEBERT (*Monatss. f. Psych. u. Neurol.*, 1899, Aug., Bd. VI, Ht. 2) reports a case of brain tumor, in which the localizing symptom was a suddenly occurring, sharp, offensive odor. The course of the case was as follows: After a period of marked irritability, the symptoms of tumor were ushered in by an attack of unconsciousness with spasmodic movements, followed immediately by a sensation of an offensive odor (the patient could give no more definite description of the sensation). Afterward occurred headaches gradually increasing in intensity, and frequent manifestations of the offensive and disagreeable odor (which later appeared less frequently and toward the fatal termination entirely disappeared), gradually increasing stupor, frequent yawning, left-sided clonic spasms, at first alone and later with

right-sided spasms, gradually developing left-sided hemiparesis, choked disc, at first right side and later left, with the right side always more advanced than the left, oculomotor disturbances, anomalies of the sense of sight, left homonymous hemiopia, bilateral destruction of the senses of smell and taste. There was no marked disturbance of sensation. During the last few days before death attacks of local hyperidrosis ensued, at first about the head, then on the head, neck and breast, and finally death with symptoms of exhaustion of the heart.

For the special local diagnosis of the tumor, the early occurrence of the anomalies of smell were of special value. The sensations of smell appeared as attacks without appreciable external origin, the examination of the nose gave no morbid appearances, and the source of the disturbance must have been some irritation of the intracranial olfactory tract. This brings under consideration the bulb and olfactory tract, as well as the cerebral structures involved in the perception of smell: the anterior portion of the gyrus fornicatus, and especially the gyrus hippocampi and the uncus, the latter being generally accepted by most authorities as the seat of the cortical centre of the sense of smell. Inasmuch as the sensations of odors were in abeyance toward the end of the disease, it was plain that after the preliminary irritation the structures involved were entirely destroyed by the growth. The bulb and olfactory tract may be excluded from consideration on account of the accompanying ocular symptoms, which must have been unilateral in event of a lesion involving only one optic nerve, whereas the symptoms were entirely cortical, as far as reference to the ocular conditions were concerned. This leaves for consideration only the gyrus hippocampi and the uncus, and the eventual bilateral destruction of the sense of smell can be accounted for by the crossed fibres of these centres.

The necropsy revealed the tumor, a glioma, in the inferior surface of the temporal lobe of the right side, occupying the uncus, gyrus hippocampi and the anterior portion of the lateral occipito-temporal convolution. Neighboring cerebral structures were compressed. Siebert, in concluding, lays especial importance upon the association of homonymous hemiopia with the disturbance of smell, in the diagnosis: if the nasal structures are healthy, and there is no external cause, the disturbance of smell indicates a lesion of the intracranial olfactory paths; if there be homonymous hemiopia, the tumor must lie posterior to the chiasm; if both symptoms appear simultaneously the location of the tumor is in all probability in the region of the uncinate and hippocampal gyri.

Erb's Disease.—ELIZABETH VON DOWNAROWICZ describes a case and reviews the literature of this rare condition in the *Monatsschrift für Psychiatrie und Neurologie*, February, 1899. At present there are forty-six cases described, which are based upon the following clinical manifestations: Muscle-weakness of the extremities and trunk, especially of the neck, and of the distribution of certain cranial nerves, slight headaches, vertigo and paræsthesiæ in different regions of the body. These symptoms are generally bilateral, although not necessarily of equal intensity. The patients complain of weakness, to which is frequently added a general

sensation of exhaustion, or the extremities may perform their functions fairly well, while the head sinks forward, the lower jaw droops, and the expression of the face is characterized by immobility which results from the half-opened mouth, and the drooling of saliva; voluntary contraction of the facial muscles is only accomplished with the greatest difficulty, ptosis, mastication and deglutition are notably involved, speech has a nasal tone, and there may be added to these symptoms double vision, due to ophthalmoplegia, increased frequency of the pulse, disturbances of respiration, dyspnœa, and occasionally paralysis of the crico-arythenoidei postici.

Paralysis and Muscular Atrophy in Tabes Dorsalis.—ARTHUR J. WHITING discusses this subject in *Brain*, XXI, No. 84, Winter, 1898, recording two personal cases, and tabulating two hundred consecutive cases observed in the National Hospital for the Paralyzed and Epileptic. Of these two hundred cases 41 per cent. presented some definite paralysis of one or more of the ocular muscles; in 12 per cent. there was diplopia but no other evidence of paralysis; in 5.5 per cent. there were nystagmoid jerkings without obvious paralysis; in many cases with definite paralysis there was nystagmoid jerking in addition. In 85 per cent. the movements of the iris were abnormal, usually exhibiting inactivity to light alone, but sometimes inaction both to light and accommodation. In 28 per cent. of the cases in which the larynx was examined with the laryngoscope there was some degree of paralysis of one or both vocal cords; in 20 per cent. of these there was in addition paralysis, or in one case merely fibrillary tremor, of half the tongue on the side corresponding with the laryngeal paralysis, and also in about half (12 per cent) of the latter cases there was observed paralysis of the palate on the same side. In 4.5 per cent. of all the cases in which the larynx was examined there was laryngeal crisis without any obvious paralysis; in 3.5 per cent. there were ataxic movements of the cords without paralysis; and in one case there were laryngeal crises with ataxia of the cords but no definite paralysis.

In 80.5 per cent. of the total number of cases there was vesical incontinence, or labored micturition, or both; thus, in 61.5 per cent. there was incontinence of urine, and in several of these cases it was noticed that sensation during micturition was good; in 19 per cent. there was either tardiness in starting the act, intermittent or feeble stream, or the patients complained of difficulty or strain in micturition, or of a lack of expelling power, some stating that they felt after each act that they had not completely emptied the bladder. In 34 per cent. of all the cases there was defect associated with defæcation; in rather more than half it was of the nature of extremely obstinate constipation, in rather less than half there was definite rectal incontinence, in some cases only after the use of aperient medicines; while in several of the cases there was laxity, or gaping of the sphincter, or prolapse of the rectum, or other objective evidence of muscular insufficiency. In a few of the cases with and without gastric crises there was evidence of dilatation of the stomach, and at the autopsy in one case with crises it was found to be very greatly dilated.

In 30.5 per cent of the cases there was demonstrable motor weakness of the skeletal muscles, usually of one or the other limb, but this includes 4.5 per cent. of hemiplegia. There were in these 200 cases sixteen with obvious atrophy, or 8 per cent., the precise percentage given by Duchenne.

The paper concludes with a note on "The Influence of Afferent Impulses on Motor Mechanisms," whose purpose is to show, in this particular connection, that destruction of the posterior roots influences the nutrition of cells of the anterior horns. Recent experiments and observations are cited, and it may be regarded as established that in some cases of muscular atrophy in tabes the lesion is nuclear, and in others it is not at present possible to exclude either a central or a peripheral lesion. It would seem therefore that tabes is as much a segmental disease as a system disease, that it is indeed strictly a neuron disease.

Green Vision in Tabes Dorsalis.—WORK DODD reported a case of this nature to the Ophthalmological Society at the meeting of March 9, 1899 (*The Lancet*, 18 March, 1899). In 1886 the patient's vision was quite good; in 1891 he had diplopia, from which he recovered. His color vision remained good till 1897 and he complained of defective sight shortly before being seen in July, 1898. When first seen the vision of the right eye was $\frac{2}{80}$ and that of the left eye was $\frac{1}{80}$. He had Argyll-Robertson pupils, optic atrophy, and contraction of the visual fields; his gait was ataxic and he had occasional trouble in passing urine. In September, 1898, the vision of the right eye was reduced to $\frac{1}{80}$, while with the left eye he could only perceive movements of the hands. He then saw every thing a bright emerald green; it appeared to him as if there was a green veil hung before his eyes through which he saw everything. He occasionally saw rose-pink spots through the green veil in places. The colors increased in intensity when he was tired, especially the rose-pink. He had also occasional sensations of very brilliant light.

The Spinal Cord in Pernicious Anæmia.—NONNE (*Deutsche Zeitsch. f. Nervenhe.*, XIV. 3 u. 4), reports the results of numerous examinations of the spinal cord in cases of pernicious anæmia, in cases of sepsis and senility, and includes remarks upon changes determined by Marchi's method in acute processes in the spinal cord. Different views have been held by different writers, Lichtheim being the first to report upon the spinal complications of fatal anæmia, which have described the lesions as being those of a combined system disease, a "cachexia of the ganglion cells," hæmorrhages and other conditions. In other investigations Nonne has reached the conclusion, which is further elaborated here, that the harmful element of the disease, on the one hand, may be generally recognized as circulating in the blood, and on the other side, there is incontestable proof that changes in the blood-vessels present a local and an ætiological explanation of lesions of the spinal cord. After the study of a number of cases, which are cited in full in the contribution Nonne summarizes as follows:

1. Diseases of the spinal cord in pernicious anæmias are focal; they have no system character, in the sense of a combined system disease, but are to be regarded as an acute disseminated myelitis.

2. The localization of this myelitis shows a relation with the blood-vessels.

3. An ætiological relation, in the sense of a toxic agent conveyed by the blood, appears very probable from the results of a series of examinations in cases of sepsis; the condition of the cross-section of the cord in such cases was comparable with that found in early cases of pernicious anæmia. An analogy with the chronic degenerations exists in connection with the vascular degenerations found in old age.

5. The gray matter may be affected in advanced cases; this lesion is however not a primary one, producing secondary changes in the white portions of the cord, but is a complication. In early cases lesions in the gray portions of the cord are not discoverable with either Nissl's or Marchi's method.

6. The visible diffuse degenerations revealed by Marchi's method in severe anæmias in cases of sepsis adjacent to local lesions permit the conclusion that they are the result of trophic changes, and that they are not merely a functional disturbance of the nerve elements. The different posterior roots and the anterior commissure show an especial predilection for the Marchi degeneration.

Rapid Cure of Chorea by Bromide of Camphor.—In the issue of *Le Progres Medical* for July 16, '98, Drs. BOURNEVILLE and KATZ report an interesting case with above title. The patient, a girl 13 years old, came under Bourneville's care at the Fondation Vallée in March, '98. The next day the patient's agitation was so great as to prevent the taking of her temperature. Absolute insomnia; forced to remain abed because unable to stand or sit. Two days later she was unable to go about much because of contusions received by striking against objects; involuntary movements have much scratched and bruised the hands. Had written a good hand five months before admission to the hospital; at the time of admission and for three weeks thereafter her handwriting was scarcely legible; *fac-similes* of specimens of her chirography accompany the article; three weeks after admission she again wrote legibly, and a few days later again wrote better than the average adult; the case was a classical one of chorea, though the authors call attention to the fact that the amelioration commenced on the right side, the one first affected. She had grown thin as an effect of the disease; her weight could not be taken till she had been at the hospital five days; under treatment she gained weight promptly; the increase amounted to four kilograms (8½ lbs.) in three months. When treatment began the temperature was generally lower than normal, whereas after the cure it was always slightly above. The principal point of this observation was the most rapid cure of chorea by bromide of camphor that the authors had ever known. It was administered in capsules (gelatin), increasing the doses often; each capsule contained twenty centigrams, but the authors do not state the number of them given; four months after admission to the infirmary the patient was taking part in all the physical exercises of the inmates, helped in the housekeeping and worked in the shop. The bromide of camphor was not the sole treatment, but was aided by hydrotherapy and gymnastics.

PSYCHIATRY

Edited by G. Alder Blumer, M. D.

Influence of Maternal Inebriety on the Offspring.—W. C. SULLIVAN (*Journal of Mental Science*, 1899, July), selected from the female population of Liverpool Prison, amongst whom habitual inebriety is very prevalent, a series of cases of chronic drunkards who have borne children; and from the history of these children, and more particularly from the particulars given by the infant mortality, has illustrated the manner in which the maternal intoxication appears to have reacted on the development of the offspring. From the large number of observations made, the following conclusions are derived:

1. Maternal inebriety is a condition peculiarly unfavorable to the vitality and to the normal development of the offspring. Its gravity in this respect is considerably greater than that of paternal alcoholism.

2. While its influence, particularly as measured by the test of infant mortality, appears to be exercised in considerable degree indirectly through deterioration of the medium, a large part also depends on the primary action of the poison. The reality of this latter mode of influence is evidenced by the tendency to still-births and abortions, by the high rate of epilepsy in the surviving children, by the prevalent mode of death, by the effects of modifications of the intoxications.

3. This primary influence of alcohol is due in part to the permanent effects of the poison on the maternal organism, inducing a transmissible degenerate condition; in part to a direct toxic action on the embryo, owing to continued excesses during pregnancy and lactation.

4. The first of these modes of primary influence is, by its nature, permanent, with a tendency to increase. The second mode, while tending also to a constant and constantly increasing operation, is susceptible to temporary augmentation or diminution.

5. Under these combined modes of influence the normal tendency of the family with alcoholic maternity is towards a type the inverse of the syphilitic family; that is to say, the firstborn children are normal, then come more or less defective children who live beyond infancy, then children dying in infancy, then still-births, and, finally, abortions.

6. Deviations from this type are probably due in many cases to oscillation in the intensity of the second mode of influence. Deviations originating in this fashion may be seen, for instance, in the death in infancy of the earliest born children of the family as a result of conception in drunkenness, and in the survival of late born children when the mother has been imprisoned during part of the pregnancy.

Post-Operative Psychical Disturbances.—E. MARANDON DE MONTYEL (*Revue de Chirurgie*, May, 1889). The writer distinguishes two groups of post-operative psychical troubles. 1. The post-operative delirium, and 2, the post-operative insanity. The former is transitory, while the latter is more or less permanent.

The post-operative delirium is usually due to an intoxication of some

kind, and among these intoxications may be classed those due to Bright's disease, septicæmia, iodoform, alcohol, chloroform, cocaine, etc.

Post-operative insanity, on the other hand, is seen only in individuals who have hereditary or acquired tendencies toward insanity. The slightest injury, wound or operation may give rise to post-operative insanity. The post-operative insanity has no definite character, but may assume different forms. Excepting thyroidectomy and certain cerebral operations there are no operations which seem to predispose to post-operative insanity. Women are more susceptible than men to this form of insanity, but this seems to be due to the fact that the nervous system of woman is more irritable than that of man.

From his observations the writer draws the following conclusions:

1. The post-operative psychical troubles form two distinct groups—the toxic delirium and the post-operative insanity.
2. The post-operative delirium may be seen in any subject and is due to an intoxication, while post-operative insanity presupposes a tendency to insanity.
3. Every post-operative delirium has its own peculiar symptomatology determined by the toxic agent which causes it, and every post-operative insanity has its peculiar symptomatology determined by the degree of predisposition to insanity.
4. Post-operative delirium can be easily explained, but it is, however, impossible to explain post-operative insanity.

OPHTHALMOLOGY

Edited by C. M. Culver, M. D.

Influence of Age in Causing Opacity of the Crystalline Lens, and the Proper Use of the Word "Cataract."—In the issue of September 24, 1898, of the *Journal of the American Medical Association*, Dr. EDWARD JACKSON publishes a very interesting article having the above title; from it have been selected some quotations, which follow:

The common use of the phrase "senile cataract" argues a general consent in the view that advanced age has some fixed relation to the condition. That it cannot be a necessary, or the only, causative factor is demonstrated by the large number of young persons that we see with opacity of the crystalline lens, and by the other fact that many reach even an advanced age without suffering from such opacity.

Of recent years much attention has been directed to certain other probable or possible factors. Among these there can be little doubt that eye-strain exerts an important influence. Many times where there had been recent impairment of vision, and upon examination lens opacity found to be the cause of it, with the cessation of eye-strain the progress of opacity has been absolutely checked. In a few, not only has the opacity ceased to increase, but there has been noticeable diminution of it. Such an occurrence is probably not very rare.

It has doubtless happened, also, to all of us to have encountered cases of lens opacity that have followed acute disease. The most striking cases of the sort that I have seen have been in connection with the grippe or epidemic influenza. In one of these cases three successive attacks of grippe in three different years were each followed by very rapid increase in lens opacity. After the first two there was slow improvement until the patient regained useful vision. The third attack left the vision reduced to the perception of moving objects, rendering extraction necessary.

With regard to renal disease as a cause of cataract, my experience would indicate that it was not very important. The routine of examination of the urine before cataract extraction has shown a comparatively small proportion of cases suffering from albuminuria, or showing casts. Angiosclerosis usually attended with occasional traces of albumen in the urine is quite common among people old enough to be especially liable to cataract. And contrary to what I had before supposed, a recent examination of the history of a series of cataract cases has not seemed to support the view that albuminuria was especially frequent.

Among 10,000 patients attending my clinical services at the Philadelphia Polyclinic and the Wills' Eye Hospital, all of whom were examined ophthalmoscopically, except those in whom the use of the ophthalmoscope was impossible by reason of opaque media, or closure of the lids, there were 1,544 over fifty years of age. Arranging these by five-year periods I find:

50 to 55.....	460	81	541	15
55 to 60.....	260	50	310	16.1
60 to 65.....	196	85	281	30.2
65 to 70.....	99	83	182	45.6
70 to 75.....	60	71	131	54.2
Upward of 75.....	23	77	100	77
Totals	1098	449	1545	29

These figures, especially the percentages, strikingly point toward the importance of age in the production of cataract. Yet if we take an affection like toxic amblyopia, especially varieties caused by the abuse of tobacco and alcohol, and arrange the statistics in similar age periods up to the age of sixty, the influence of age is quite as striking. Thus the age of twenty successive patients affected with toxic amblyopia, arranged in ten-year periods, was as follows:

Under 30	None in 4627
30 to 40.....	3 in 2116
40 to 50.....	8 in 1412
50 to 60.....	4 in 851
Above 60	5 in 696

Yet we hardly think of toxic amblyopia as due to age. So with senile cataract. While age is certainly a very important factor, it probably for many cases only constitutes a predisposing cause. Before the age of fifty, cataract, aside from the result of traumatism, is rare; even at that

age and for some years afterward, the cases giving a history of injury constitute a rather large proportion.

It has seemed to me that at this time eye-strain produces a decided effect in increasing the number of cases of lens opacity, since just before that age all patients suffer some strain from their loss of accommodation. The history of individual cases points still more strongly in this direction, many times it includes the rapid increase of the opacity during the period of severe strain from presbyopia, and after that the opacity becomes entirely stationary and remains so under proper supervision of the eyes for years.

Strain of the eyes from presbyopia is one way in which age may predispose to cataract. It is possible that later, in quite an opposite direction, the same influence may be exerted.

The connection of cataract with chorioidal disease and myopia is one of the few established points of its pathology. Now, the senile and the myopic eye have this in common: That there is less use of normal accommodation, and whatever influence it may exert upon the nutrition of the eye is to that extent lost. It is certain that myopic and senile eyes now show the same tendency to thinning of the chorioid and loss of the retinal pigment layer, and it seems not unlikely that intermittent accommodation has some influence in maintaining the nutrition of the lens. There is, besides these specific influences, the general failure of nutrition that occurs in old age, and it is not surprising that transparency, of a highly specialized character, should be lost simply through the general lowering of nutritive activity.

But these statistics suggest another important thought. Of patients upward of 75 years of age, 77 per cent show some opacity of the lens. Are all such patients to be informed that they are suffering from cataract?

Gould's Dictionary gives, as the definition of cataract: "Diminished transparency or opacity of the crystalline lens, or of its capsule." This is substantially the definition given in other works of reference. But cataract, to the general public, means a disease of the eye leading to blindness, and only curable by a capital operation. Many people have been rendered skeptics as to the honesty of the surgeon by a diagnosis of "cataract," which has not, after many years, been followed by blindness or any serious impairment of vision. Many have been rendered extremely unhappy by dread of blindness from which they were never likely to suffer. There has been some confusion of thought in the profession upon the subject. I once heard a surgeon announce in a State Medical Society that he favored operation on cataract in all cases when the vision fell to 20-70. I have known a surgeon of respectable antecedents to propose and urge such an operation for a patient who had some lens opacity, but who could still see to do fine sewing and read ordinary type with either eye.

The conclusion is to avoid the use of the name "cataract," except in such cases as are likely to need operative aid; to speak of "lens opacity" in other cases, and not alarm those who would be frightened by the word "cataract."

ALBANY MEDICAL ANNALS

Original Communications

REPORT OF THE SURGICAL SERVICE OF THE ALBANY HOSPITAL FOR THE QUARTER ENDING OCTOBER 1, 1899.

By WILLIS G. MACDONALD, M. D.,

Attending Surgeon, Albany Hospital.

A review of the work done and an inquiry into results accomplished frequently affords distinctive advantages to the progress of surgery. At the completion of our quarterly service in the surgical division of the new Albany Hospital an examination was instituted into the amount, character and results contained in the service. The resident surgeons, Drs. Bielby and White, very carefully examined our case books, classified the diseases presented and made a table of the operations performed. These tables are published as an appendix to this report, together with an abstract from our report to the Board of Governors of the hospital. During the earlier part of the term of service the hospital was not completed, but the construction has not materially interfered with our work.

It will be observed that 257 operations were done among 309 patients with twelve deaths. Five of these deaths occurred in patients upon whom no operations were done, leaving a mortality of seven in 257 operations.

Some of the conditions have been of sufficient interest to require discussion in detail and four brief papers are presented

in relation to: Amputation of the Female Breast, Appendicitis, Erasure of the Knee and Angiotripsy. Out of our abundance of material, much that could be considered with profit must await further report at another time.

A group of seventy-eight cases involving cœliotomy presented themselves for treatment with five deaths associated with the operations. In all of the fatal cases sepsis was present at the time of operation, either in the way of general septic peritonitis or localized collections of pus in the pelvis. No case of post-operative infection of any degree of severity presented itself and the surgeons have expressed no anxiety in that respect. Not a single abdominal wound has suppurated during the quarter.

The burden of so considerable a service during the summer months has been made much lighter through the hearty co-operation and intelligent assistance of Drs. Richardson, George and Traver of the out-door departments, as well as of the resident staff.

AMPUTATIONS OF THE BREAST.

A series of twelve cases presented for treatment, eleven of carcinoma and one of Paget's disease. In one case both breasts were involved and removed at one operation. All recovered from the operation, and in only one was there any septic infection and that gave no trouble. In one rather acute case in a very stout woman, the opposite breast has already become involved, together with the mediastinal glands as shown by dyspnœa and paralysis of vocal chords. From experience, carcinoma in the obese seems far more malignant and the prognosis correspondingly worse. In five other cases a recurrence may be reasonably expected as the cases were far advanced at the time of operation; in all, the axillary glands were distinctly infiltrated, and in three the glands above the clavicle were found involved and removed. The remaining cases were favorable ones for operation, with no material retraction of the breasts, infiltration of the overlying skin or lymphatic involvement. This last group of cases is sure to have a long respite from the disease with a great probability of absolute cure.

The question naturally presents itself: Why operate in

the advanced cases? We are sure that it prolongs life; probably a year or more. It reduces the suffering of the patient and makes the condition more bearable through the absence of large, sloughing and offensive ulcers. It keeps patients away from quackery. The mental effect of an operation is also good. No one wishes to be abandoned to a painful and necessarily fatal disease without a single effort in their behalf. It is good surgery always to clear away the local evidences of malignancy, although the ultimate prognosis is bad. We are asked: "How extensive an operation do you do for breast cancer?" The answer is clear; that we do the most complete dissection that is compatible with the anatomical relations and the immediate safety of the patient; that the incisions open up the tissues widely; that the skin overlying the growth, whether infiltrated or not, is freely excised regardless of skin defects at the close of the operation, and that all flaps raised are freed from as much underlying fat as possible; that the entire breast and costal portion of the pectoralis major is removed from the chest wall, and the axilla cleared from apex to base of every lymph node and all fat; that at the completion of this operation, the axillary vessels will be exposed and cleaned from the first rib to the insertion of the deltoid muscle; that after exact hæmostasis and plastic transplantation of flaps, the wound is closed as nearly as possible without tension and dressed.

Skin grafting is not employed as a routine practice, as in our experience the defect will close practically as soon as the site from which Thiersch grafts have been taken will heal. Besides the thigh wounds are a frequent source of great discomfort to patients.

This operation is practically identical with that of Halsted and more extensive than that of Kocher. There is no operation done that is more fatiguing to the surgeon or trying to the patient. It should always be deliberately done as the chief operation of the clinic. It is difficult to understand how anyone, however skillful, can satisfactorily complete the operation in less than ninety minutes and much more time may be required.

We try to keep our operative cases returning to us after the operation for examination. A long continued course of

tonics, changing from time to time, keeps the patient under observation. As the extent of tissue removed has gradually increased, the number of recurrences has gradually decreased. The number of women now free, seven, six and five years after operation is constantly increasing. In a future paper, a detailed account of the number of cases will be given, together with results.

There can be no doubt that the surgery of cancer wherever situated has improved marvelously in the last decade, and that in favorable cases, future immunity can be predicted with increasing confidence.

APPENDICITIS.

The essential features of all the cases of appendicitis treated during the quarter in the surgical service are presented in the table compiled from the clinical charts of the hospital. While the group of cases is entirely too small for any generalizations, yet its character and other conditions associated with it are so similar in all respects to our entire experience with the disease that we may be allowed to discuss some of its relations. First: The mortality in this unselected and ambulance group of cases is five and five sevenths per cent under surgical treatment, or two deaths in thirty-five cases. During this same period, we are familiar with six fatal cases in the same vicinity under non-operative or medical treatment. Three of these cases were seen by the writer just before death. When the extremities are cold, the pulse so feeble and uncertain that it cannot be counted, the surgeon gains only the odium of having lost another patient through operation. There is nothing that produces so wholesome an effect upon the minds of some physicians as to be allowed to retain under medical treatment the responsibility of an absolutely fatal case of appendicitis. After such a course, they usually have seen one death following the medical treatment.

A surgeon of our acquaintance was seeing a neglected case of appendicitis with a very successful general practitioner in an adjoining city. The patient's legs were cold above the knee, the abdomen was enormously distended, foecal vomiting was continuous, restlessness marked and death not far away. The pupils were contracted to pin points from morphia

administered every two hours. After the usual examination of the patient, the family physician led the way to the consultation room and introduced the conversation as follows: "I have never had a death from appendicitis under medical treatment in my practice of twenty-five years. However, I think this is a case for operation: I am convinced that it is. But these people are very much frightened. They have heard of Mr. K. and Mrs. S. both dead after operations for appendicitis. The operation is very unpopular in the neighborhood, and I had very hard work to gain their consent to a surgical consultation, etc." "Yes, doctor," the surgeon replied, "I saw Mrs. D. with you when she was dying from opium narcosis and septic peritonitis, and relieved you of further responsibility by doing a 'forlorn hope' operation. Another surgeon did a like service for you with Mr. K. Both cases have produced a bad impression in the neighborhood. Both surgeons have been roundly abused for a reckless disregard for human life and you have never seen a case die under pure medical treatment. You are about to see a miracle performed. A patient is going to die under medical treatment unless you get another surgeon very quickly, as I shall not operate in this case and you are going to assume all the responsibility which the public, rightly or not, places in the matter. I shall say to his waiting and dependent family: the patient's condition is extremely critical, but no surgical intervention is now indicated. You had better revise your treatment, give no opium and call a surgeon about three days earlier in your next case." With this conversation they parted. Before the surgeon arrived home the patient died and the family physician is somewhat occupied at present with explanations why an operation had not been done and why this case was so peculiar. Although the surgeon who acted as consultant in the foregoing case is no longer the doctor's surgical advisor, another competent surgeon is, and the cases of Mr. K., Mrs. D. and Mr. Y. are not being repeated.

In our anxiety to afford surgical relief, it is a question if we do not go too far in operating on cases already beyond intervention, thus increasing materially the mortality in operations. In our personal experience we have gone as far as

was consistent with returning the patient to bed alive after the operation. On the other hand, extreme caution is as fatal as indecision and delay. There is a normal mortality of considerable magnitude following operations for appendicitis after perforation. If it does not show itself in a surgeon's statistics, the surgeon's mental attitude towards neglected appendicitis is wrong. It is very difficult to decide at times the question of operation. The most unpromising cases get well after operation occasionally, especially in the young. By reference to the table it will be seen that several operations were undertaken after the onset of general peritonitis. The general criticism could be fairly made that a large proportion of the acute cases came late to the operation. The necessary limitations of this report prohibit a discussion of the causes of delay. They may be briefly summarized as: self treatment by patients, unfounded confidence upon the part of physicians in drugs such as olive oil, salines, opium, local applications of blisters, clay poultices and other much vaunted remedies, the mistaken notion that nearly all patients recover from first attacks, that interval operations are always to be done if any; and the adverse criticism of popular newspaper medicine. The average newspaper editor's ignorance of appendicitis is only exceeded by his volubility. Again, the effort upon the part of the profession to make very close clinical distinctions is a frequent source of delay and disaster.

In a large proportion of cases where general peritoneal infection has occurred, will recovery follow complete operations? No one can safely prognosticate until the operation is completed, hence the necessity for, at least, exploratory incision. In our experience, if the peritoneal exudate is serous, sero-purulent or hemorrhagic the probabilities of recovery are much greater than if the exudate is plastic or sero-plastic. In the first class of cases the exudate is easily removed by partial evisceration and flushing with normal salt solution in quantity. The sepsis is controlled. Where large quantities of plastic material are generally distributed, no method of operation is effective in any considerable proportion of cases. The time required, the difficulty experienced and the necessary traumatism inflicted upon the peritoneum are

beyond the endurance of the patient. If you remove all the plastic exudate, the patient dies of shock. If you do less he dies of continued sepsis. We have succeeded on a few occasions in saving a patient when the exudate was not fully organized or was yet local in its distribution.

It is rarely possible to do so serious an operation in private houses without further infecting your patient. The highest order of surgical technique is demanded. The resources of the well-equipped hospital present inestimable advantages and all severe cases should be removed there for operation. Sixteen of the thirty-three operative cases were admitted through the ambulance service. During this same period, July to October, 1899, fifteen operations for acute appendicitis were done in private houses within a radius of one hundred miles. Two deaths followed these operations, although as a rule they were more suitable cases. In private houses, the so-called dry method has been employed as much as possible and careful sponging substituted for intra-abdominal irrigations. Whenever possible, the abdomen was closed completely.

ERASURE OF THE KNEE-JOINT FOR SYNOVITIS.

Erasure of the knee joint for tubercular synovitis or other chronic inflammatory processes has experienced a very variable estimate concerning its value. As a rule the pure orthopedist has never been able to see any advantage in the operation. On the other hand the surgeon has frequently undertaken the more extensive operation, anatomically, of excision. In our experience with erasure, which now numbers at least twenty operations, we have found that in certain conditions it presents distinct advantages over both mechanical treatment and excision.

It has been argued from time to time that by a purely conservative plan of treatment with suitably adjusted fixation apparatus, either of plaster or in the way of braces, that cure with a more or less useful extremity occurred in the majority of cases. In following out this purely non-operative plan of treatment, it will be found that the period of treatment varies from two to four years or more and that a relatively large number of these patients die of general tubercular infection.

SURGICAL SERVICE, ALBANY HOSPITAL—CASES OF APPENDICITIS, JULY-OCTOBER, 1899

Series G. Hospital No.	DATE IN THIS HOS- PITAL	NAME	AGE	SEX	ACUTE	RELAPSING	NUMBERS OF ATTACKS	INDICATIONS FOR OPERATION	CONDITIONS FOUND AT OPERATION	DRAINAGE	RESULT	AMBU- LANCE	REMARKS
435	7-1-99	J. C. Chatham	32	M.		1	3	Repeated attacks. Intestinal indigestion, constipation. Local tenderness.	Distended appendix. Faecal concretion. Intestinal adhesions. Recent.	No	R.		
443	7-1-99	B. L. Central Bridge	26	F.		1	2	Had an attack with generalized peritonitis a year ago. A second in April, 1899. Invalid since.	Appendix and head of cœcum tubercular. Resection of cœcum and appendix.	No	R.		Left ovary removed. Recovery very slow.
467	7-1-99	E. R. Albany	41	F.	1½		No history	Had been ill two weeks. Large abscess. On admission, temperature 103.2 F. Pulse 132. Had chill same morning.	Abscess opened, cavity explored and irrigated with hydrogen dioxide and normal salt.	Gauze and Glass	R.	Yes	Patient profoundly septic. No effort made to find appendix or relieve adhesions.
487	7-1-99	M. S. Albany	30	M.	1		1	Had been ill ten days. Treated with olive oil. Ice locally. Tumors size of orange. Temperature 102.8 F. Pulse 116.	Appendix perforated. Small abscess. Adhesions relieved. Appendix removed. Local irrigation. Normal salt.	Gauze	R.	Yes	
494	7-1-99	R. F. Albany	6	M.	1			Ill a week at home. Exquisite local tenderness. Abdominal distention. Pulse 120.	Perforated appendix. General serous peritonitis. Removed appendix. General abdominal irrigation.	Gauze and Glass	R.	Yes	Convalescence complicated by chicken pox. Was very ill several days.
496	7-1-99	F. C. East Albany	16	M.	1		2	Been ill two days. Violent pain, vomiting. General tenderness. Pulse 146. Respirations 40. In profuse perspiration.	Preliminary transfusion of normal salt. Perforation. Gangrenous appendix. General peritonitis with plastic lymph.	Gauze and Glass	R.	Yes	Abdominal incision not closed. Multiple drains after irrigation. Very ill for two weeks.
500	7-3-99	J. C. Albany	31	F.	1			Ill thirty-six hours. Vomiting. Local pain and tension. Pulse 112. Temp. 101.2 F.	Acutely inflamed appendix removed. No adhesions.	No	R.	Yes	Wound closed at once. Condition satisfactory.
513	7-5-99	F. S. Ravena	21	M.	1		1	Had been ill two days. Increasing local tension and pain. Chill. Temp. 103 F. Pulse 116.	Gangrenous appendix with constrictions removed. Had not perforated until operation.	No	R.	Yes	

523	7-6-99	G. D. Unknown	About 35	M.	1	Un- known	Entered hospital with distended abdomen. Great prostration. Pulse 140. Could obtain no history. D. spoke only Italian.	General septic peritonitis, sero-plastic, from perforated appendix. Saline transfusion prior to operation. Median incision.	Yes	D	Yes	Patient died of shock two hours after operation. Finney's method of treating peritonitis employed.
558	7-12-99	L. S. Albany	58	M.	1	No history	Ill four weeks. Large local abscess. Constitutional disturbances marked.	Abscess opened, explored, irrigated and drained. Two concretions removed from abscess.	Yes	R.	Yes	No effort was made to remove appendix.
576	7-16-99	J. D. C. Albany	24	M.	1	3	Local pains for two weeks. Slow development of tumor. Chill.	Abscess containing six ounces of pus. Appendix removed from abscess wall.	Yes	R.	Yes	Appendix was removed without breaking adhesions.
606	7-26-99	W. H. Middle Granville	33	M.	1	Several	Usual local symptoms for two weeks. Tumor gradually developed.	Large abscess opened, irrigated and drained. Appendix not removed.	Yes	R.	Yes	Patient's general condition bad at time of operation.
616	7-28-99	F. F. L. Delmar N. Y.	19	M.	1	1	Patient had had two attacks of appendicitis, the last three weeks ago.	Distended appendix. Signs of recent inflammation.	No	R.		
629	8-1-99	W. Z. W. Bridport Vt.	19	M.	1	2	Had been suffering for a year. Appendix could be easily palpated.	Removal of an adherent and distended appendix.	No	R.		
646	8-3-99	F. A. B. Coopers- town, N.Y.	49	M.	1	Several	History of case: Local symptoms, partial intestinal obstruction.	Adherent and atrophied appendix. General adhesions.	No	R.		
648	8-3-99	H. A. F. Schenecc- tady, N. Y.	23	M.	1		Severe pain and tension, with increasing symptoms under treatment.	A large and twisted appendix filled with concretions and pus.	No	R.		
655	8-8-99	P. V. V. Rural Grove Vt.	28	M.	1	2	Three distinct attacks in five months and local symptoms.	Appendix was adherent to ileum, into which it was discharging.	No	R.		Intestinal resection with suture. No button.
662	8-11-99	J. P. O. Schenecc- tady, N. Y.	47	M.	1		First attack: Pronounced constipation, local tenderness. Treated by salines with ice locally.	Attack not severe, but patient remained in bed two weeks. Operation delayed for business reasons to beginning of second attack.		R.		
678	8-17-99	A. De F. Coeymans N. Y.	29	F.	1	7	This was eighth attack in five years. Has not been free from local pain in two years.	Appendix found very adherent. Chronic plastic peritonitis.	No	R.		

SURGICAL SERVICE, ALBANY HOSPITAL—CASES OF APPENDICITIS, JULY-OCTOBER, 1899—Continued.

Series G. Hospital No.	DATE IN THIS HOS- PITAL	NAME	AGE	SEX	ACUTE	RELAPSING	NUMBER OF ATTACKS	INDICATIONS FOR OPERATION	CONDITIONS FOUND AT OPERATION	DRAINAGE	RESULT	AMBU- LANCE	REMARKS
679	8-17-99	T. G. Albany	46	F.	1		Had "colics"	Entered hospital with pulse 126. Great abdominal distention. Had been ill a week and treated by a druggist.	Distinct localized abscess. Adhesions very frail. After local irrigation adhesions separated and appendix removed.	Yes	R.		Very ill for several days.
710	8-22-99	J. F. H. Albany	27	M.	1			Had treated himself for colic, two days. Perforation before physician called. Pulse 126. Temp. 104.6 F.	Was removed at once to hospital. Median incision. General septic peritonitis. Gangrene of appendix.	Yes	D.		After operation temporary improvement. No satisfactory movement of bowels. Died six days after operation.
728	8-28-99	E. R. G. Albany	29	M.	1		1	Had a previous attack a year before. Increasing symptoms.	Appendix distended with mucus and deeply congested.	No	R.	Yes	Had broncho - pneumonia from ether.
731	8-28-99	A. B. Schenecc- tady, N. Y.	36	M.	1			Patient ill three days. Constipation. Local symptoms.	Patient had chronic nephritis. Was very fat with a weak heart.				With salines and local cold. Patient slowly recovered without operation.
734	8-29-99	A. L. H. Ravena, N. Y.	6	F.	1			Had been vomiting and in pain eighteen hours. Great local tenderness. Pulse 130. Temp. 101. Chill.	A gangrenous appendix removed. Perforation was impending.	Yes	R.		Same physician had lost a patient a week previously from septic peritonitis and did not delay.
735	8-29-99	I. M. Albany	12	F.	1		?	Ill three days, vomiting. Local pain, tension. Thigh flexed. Pulse 124. Temp. 96.4.	Preliminary saline transfusion. Appendix perforated, General peritonitis. Sero-plastic.	Gauze and Glass	R.	Yes	Fever and high pulse continued for several days. Finally slowly recovered.
747	8-31-99	E. M. G. Albany	14	F.	1		3	General abdominal distention. Local tension. Pulse 126.	Appendix gangrenous. No adhesions. Serous peritonitis.	Glass	R.	Yes	
763	9-2-99	J. A. C. Duane, N. Y.	34	M.		1	4	Previous history: Local tenderness. Appendix palpated.	Appendix partially atrophied. Concretion with mucus in distal extremity.	No	R.		

775	9-8-99	W. H. C. Gloversville, N. Y.	40	M.	1	2	Previous history: Local tenderness and tension. Had been cured by olive oil.	Appendix surrounded by adhesions and contained pus and concretions.	No	R.	Case was complicated by chronic interstitial hepatitis. Patient vomited blood in quantities after operation.
783	9-9-99	A. V. H. Corinth, N. Y.	24	F.	1	?	Obscure symptoms referred to right iliac region. Right ovary movable with appendix.	Right uterine appendage and appendix bound together by very firm adhesions. Both removed.	No	R.	
798	9-13-99	A. J. B. Albany	35	M.	1	Several	The patient was a physician who had several minor attacks. The last most severe.	Appendix found among adhesions and its lumen obstructed.	No	R.	Operation did not establish which organ was primarily at fault.
803	9-14-99	J. F. R. Johnstown, N. Y.	41	M.	1	4	History of four previous attacks. Last one two weeks ago.	Appendix partially atrophied. Distal end filled with mucus.	No	R.	
816	9-18-99	K. B. Albany	12	F.	1		Symptoms pronounced for four days. Induration.	Abscess evacuated. Local irrigation. Separation of adhesions. Removal of appendix.	Glass	R.	Yes
825	9-18-99	M. K. Albany	34	F.	1	2	Duration of present illness one week. Worse for last day. Abdominal tension, great pain. Pulse 116.	Small abscess partially walled off. Appendix perforated and partially gangrenous. Removal.	Glass	R.	Yes
839	9-22-99	M. S. Albany	30	F.	1		Illness of three days. Increasing severity. Great tenderness, flexion of thigh on abdomen.	Appendix found behind cæcum in a bed of pus, and removed. Irrigation.	Gauze and Glass	R.	Yes
858	9-28-99	A. E. D. Westfield, Mass.	36	M.	1	Several	First attack two years ago. Has never been well since. Local pain and tension.	Appendix adherent to rectum, where it had apparently discharged. Removal of appendix. Intestinal suture.	No	R.	Right pyo-salpingitis also operated upon at same time.

A conservative estimate of the mortality of general tuberculosis occurring in patients suffering from a primary tubercular bone or joint lesion will not vary far from 20 per cent. Again, orthopedic surgeons are already too familiar with the class of cases of bone or synovial tuberculosis occurring in children of families presenting a distinctly tubercular diathesis. I have in mind at the present time the history of a case of a male child five years old who presented the earliest symptoms of hip disease. On inquiry, it was found that in two generations back a number of cases of pulmonary and bone tuberculosis had occurred. The grandfather of this child had a healed bone tuberculosis; the mother a tubercular kidney.

This patient was treated by one of the best orthopedic surgeons in New York by the most approved non-operative methods. The child received every advantage of climate, ideal hygienic conditions and the best nursing, and within a year of the onset of the first symptoms in spite of all that had been done, abscesses developed about the hip together with pathological dislocation, and, finally, a general disseminated tubercular infection ending in death within two years of the onset of the first symptoms. This case is but a type of several that have occurred within my personal observation, and these are the cases in which the active tubercular foci should be destroyed at the earliest moment.

It seems to me that the operation of erasure of the knee occupies a middle ground between excision and mechanical treatment. Personally, I have never seen any good come from draining a tubercular knee-joint with ordinary drainage tubes, although in the hands of others I have seen it frequently tried. It occurs to me that incision and drainage of the knee joint is a harmful process rather than otherwise. I have seen temperature charts which until the drainage tubes were introduced did not deviate more than a degree and a half or two degrees from normal within twenty-four hours, within a few days subsequent to the introduction of drainage tubes to the knee joint there was a material rise in temperature with serious systemic infection and a general exacerbation of all the symptoms. I have never seen a case in the acute stages of the disease in which this line of treatment succeeded. Joints in which there is a moderate accumulation of fluid and disten-

tion of the synovial sac with tubercular granulation tissue, even though there may be an involvement of the epiphyseal extremities of the femur or tibia, are suitable ones for erasure, especially in cases that show a disposition to grow worse under mechanical treatment. Erasure presents also distinct advantages in that there is no material shortening of the limb as a result of the operation.

Contrary to the experience of Ridlon Jones and others, ankylosis does not follow erasure in any considerable number of cases. On the contrary, by far the greater part of the cases have motion to the extent of 60 degrees at least, and many patients walk without perceptible limp.

Of the three cases operated upon during the quarter, all were in adults. The first one occurred in a farm laborer thirty-five years old who had suffered from a chronic synovitis of the right knee joint for ten years. The onset of the symptoms were gradual and he was able to follow his occupation with some difficulty for three or four years. At this time, his knee was treated by counterirritation and fixation for a period of fifteen months with symptomatic cure. He remained well and was able to follow his occupation until the summer of 1898 when his knee began to give him trouble again. A return to the old treatment, fixation and the actual cautery, was now employed and continued until he entered the hospital early in July of this year. His family history was good. He had lost considerable flesh in the last six months. On examination, the knee was found swollen, with little evidence of accumulation of fluid within the joint. The synovial pouches both above and below the patella were filled with material which gave the sensation of spongy granulation tissue. The inner tubercle of the tibia was extremely tender to the touch and the skin lying over it presented evidence of the frequent application of blisters. There was fixation of the joint through muscular spasm but no ankylosis or pathological dislocation. The patient's temperature was gravitating between 99.5 and 102°.

After the usual preparation, patient was etherized, an Esmarch's bandage applied above the diseased knee joint and the joint opened by the usual U-shaped incision employed for excision. After dissecting back the flap, the patella

was sawn through its center and lateral incisions were carried directly upward through the aponeurosis, opening up the recesses of the synovial sac. With the limb extended, both fragments of the patella reflected upward and downward. The entire diseased synovial membrane was removed with the serrated scissors and the curette. When this was completed, the joint was flexed and the process continued about the intra-condyloid ligaments, removing every portion of diseased synovial sac possible. The articular cartilage over the inner condyloid of the tibia was inflamed, softened and connected with a tubercular focus underneath. A trephine three-fourths of an inch in diameter removed a button of bone from the head of the tibia, and the whole cavity was cleared out with the curette. The field of operation was now irrigated with normal salt solution, dried and packed with gauze, and the Esmarch removed. Commencing at one end of the field of operation, all bleeding points were ligated with fine catgut, removing the tampon as the ligation proceeded. After exact control of the hemorrhage, the joint was again dried, the bone cavity filled with iodoform dissolved in ether and carefully packed with a single strip of iodoform gauze. The incisions parallel with the patella were now closed by continuous catgut suture and the patella reunited by an encircling suture of silver wire. A rubber drain was passed through the joint underneath the patella from side to side and a single strip of iodoform gauze carried into each recess and allowed to project laterally on each side of the joint. The U-shaped flap was carefully sutured with silkworm gut and the whole limb enclosed in a large aseptic dressing with moulded plaster of Paris splints for fixation. On the fifth day the dressings were changed for the first time and all the drainage, rubber and gauze, removed. At the expiration of ten days the flaps were united and a plaster of Paris bandage applied to the limb and the patient allowed out of bed. At the end of three weeks he was allowed to return to his home with the plaster dressing readjusted. Three weeks later the bandage was removed and a small posterior splint applied. This was continued for two weeks longer and the patient was allowed to bear weight on his leg and to go about with a cane, although cautioned about flexing his knee. He returned to the hospital on the

10th of October, coming into the clinic without assistance and walking with relatively little limp. On examination, it was found that the wound was soundly healed, free from all irritation and that he had motion in the joint of not far from 45° . The head of the tibia and the lower extremity of the femur were not larger than the corresponding bones in the other limb. The circumference of the knee over the patella was three-fourths of an inch less than its sound fellow. The patient expressed himself that the knee was better than it had been for five years and that he had gained twenty pounds. He was cautioned concerning the use of it and discharged from all further treatment.

The second case, also an adult male, gave a history of two years standing. Some six months previous to his erasure an effort at aspiration had been made and this followed by the introduction of drainage tubes through and through the joint, one above and one below the patella. Shortly afterward the wound became infected and he was transferred to the isolated ward. He suffered from septicæmia with serious inflammatory reaction about the knee for two months.

When the operation was undertaken it was with the understanding that the first incision was to be exploratory and that amputation might be necessary. The operation was precisely similar to the one employed in the previous case with the exception that no epiphyseal foci were opened. As a result of his septic inflammation, some ankylosis was present. No effort was made to break this up. Six weeks after operation he left the hospital with a posterior fixation splint, but was able to bear his full weight upon the limb without distress. He is yet under observation.

The third case occurred in an adult female, having a distinct tubercular history. She had been bed-ridden several months before operation. There was a distinct tubercular history in the family. After the operation, which presented no unusual features, there was a distinct rise in temperature for two days, but the wound presented a healthful condition. At the expiration of a week, all drainage was removed from the joint and a permanent plaster of Paris dressing applied.

She still remains in the hospital although her limb is in good condition and her general health much improved.

ANGIOTRIPSY.

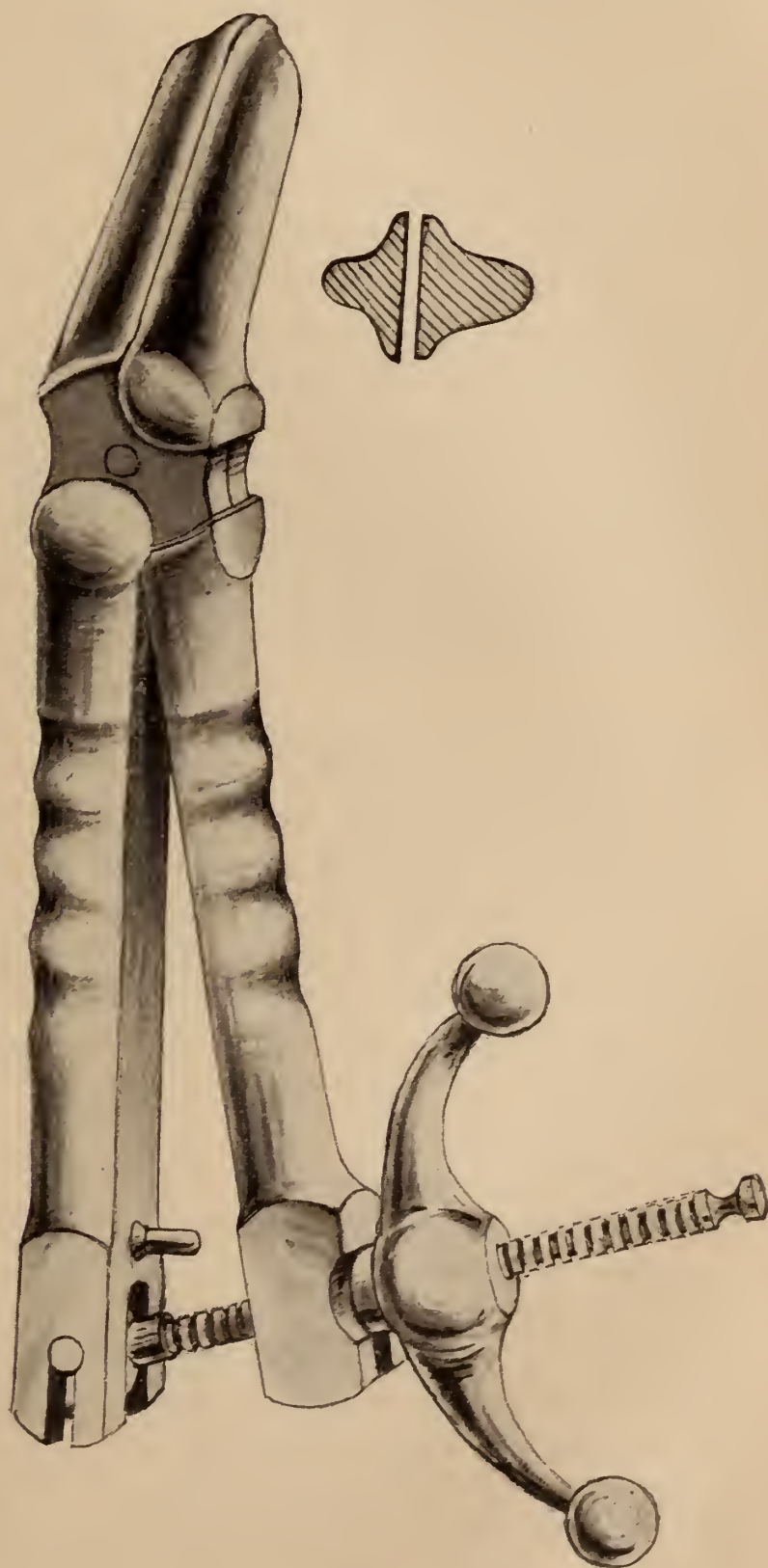
The recent reports of Doyen, Tuffier, Landow and Newman concerning the use of the angiotribe in the control of hemorrhage, led me to purchase the instrument devised by Dr. Newman of Chicago and give it a trial. We have employed it very generally since. The twelve cases of vaginal *cœliotomy* indicated in the table were all done without the use of ligatures. In ten cases the entire uterus and appendages were removed; in the others, one or both appendages. By carefully following the plan advised by Tuffier and Newman we have had no secondary hemorrhage following the use of the instrument.

The question of the use of clamps in vaginal hysterectomy, however difficult may be the operation, may be safely regarded as settled in the substitution of the use of the angiotribe. The clamp operation never appealed to many surgeons as a complete surgical procedure. It was an operation of protest rather than election. Returning the patient to bed with the vagina filled with clamps and gauze packing left much to be desired in the way of a perfect surgical procedure. However, the employment of the angiotribe and its removal after remaining *in situ* for two minutes has presented a satisfactory substitute. With instruments of perfect mechanical construction and careful application the safety of the procedure is established, especially in relation to this particular operative procedure.

Being allowed to discuss perhaps more fully the operation of vaginal hysterectomy, we may be permitted to express the opinion that with perfect technique, it has a far wider field of application than has ordinarily been given it by American surgeons. We find ourselves operating progressively more frequently by the vaginal route than previously, and we believe with advantage to our patients. Primarily having confined the operation almost exclusively to the treatment of malignant diseases, we have progressively employed it in cases of pronounced septic infection, involving both the uterus and the appendages, and as a substitute for hysterectomy in many selected cases of uterine fibroid. Its usefulness in accumulations of pus in the pelvis over suprapubic

To Illustrate Dr. Macdonald's "Report of the Surgical Service of the
Albany Hospital."

Albany Medical Annals, December, 1899.



incision is distinctive. In the abdominal sections which we have done in these cases we have never felt justified in closing the abdomen without drainage, and in a very large proportion of cases we have been compelled to leave the abdominal wound partially open for the subsequent removal of gauze tampons, or, at least, glass drainage tubes. In a very considerable number of cases treated in this manner ventral hernia inevitably follows, it does not matter by whom the operation is done. As yet we have not met with any of the serious complications in the way of intestinal adhesions that have been urged against the vaginal route of operation. On the contrary, we have found the enucleation of pus sacs of considerable size by the pelvic route quite as easy, and associated with as little, and even less, systemic reaction than through the older method of operation through the abdomen. The convalescence after vaginal cœliotomy is certainly far more comfortable to the patient than after abdominal section. The stay of patients in the hospital is correspondingly shorter and no subsequent attention to the wound is required after the patient leaves the hospital.

Unless the uterus is to be removed by morcellement, or bisection of the body is required, certain attention to detail presents distinct advantages. For a number of years I was in the habit of introducing within the uterine cavity a harpoon similar to that devised by Prior, for the purpose of fixing the uterus and bringing it into the field of operation. In cases of malignancy or of pronounced uterine infection, we believe this to be a technical error which predisposes greatly to infection. More recently, after the preliminary cleansing of the vagina, we have at once cut away diseased tissue or made an incision across the cervix in such a manner that the whole cavity of the uterus could be closed by a running silk suture across the cervix. After this preliminary step, the vagina is again carefully cleansed and the preliminary incision made. While no routine has been absolutely followed, it is our custom to open the anterior vaginal fornix first as far as the peritoneum, and then the posterior fornix, opening the cul-de-sac of Douglass. At this time, before introducing any tampons into the abdomen, we stitch over the vaginal and peritoneal surfaces with a running catgut suture, introduced

well to the base of the broad ligament one suture passing just within the base of the broad ligament. Having completed this step of the operation with the pelvis moderately elevated, the plain gauze tampons are introduced within the pelvis well above the fundus of the uterus and behind the uterine appendages. The angiotribe is now placed upon the base of the broad ligament on either side and its blades completely closed. Two instruments adjusted in succession present a time saving advantage. Immediately after their adjustment the uterus is separated up to the tops of the angiotribe on either side. The anterior vaginal fornix is now completely opened and the fundus drawn into the wound. Sufficient time has now elapsed that the angiotribes may be released from the base of the broad ligaments and the stumps allowed to retract. Ordinarily sufficient room will be afforded to separate any adhesions existing about the uterine appendages and to bring them forward into the vagina. Again the angiotribes are applied just beyond the ovary to the upper third of the broad ligament and securely closed. The division, after two minutes, is continued and the angiotribes applied on either side to the remainder of the broad ligament and the uterus cut away. During the interval of waiting, the field of operation is carefully wiped dry, small bleeding points, if any exist, are caught and tied with fine catgut, after which the angiotribes are removed. The tampons introduced into the abdomen are now withdrawn, the vagina wiped dry and a new tampon introduced between the stumps of the broad ligament and allowed to remain a moment to determine whether any hemorrhage has occurred. As a rule it will be found that the wound is perfectly dry unless extensive pelvic adhesions have been separated in the removal of the appendages. Under such circumstances, it may be desirable to carefully pack the pelvis with iodoform gauze. Seldom will it be necessary, however, to carry the vaginal tampons farther than just within the folds of the vaginal incision. The entire operation may be completed within a half hour with very little loss of blood and no shock.

It has been my custom in vaginal hysterectomy to employ forceps curved on edge. I have been able to apply these with greater facility, and for this reason I have modified

somewhat the angiotribe devised by Dr. Newman, by making the instrument shorter both in blade and handle, increasing the strength of the blades and placing them at an angle of about 40° to the handles. I have also had the handles arranged with a grip, which affords greater facilities for fixation during the operation of the instrument. In our hands we have been able to employ it with greater facility than the straight instrument. A drawing is presented in connection with this report, of the writer's modification of the instrument. The mechanical construction of the modified instrument does not present any difficulties.

In our general surgical work we have employed the angiotribe for a variety of purposes. It will be remembered that Allingham several years ago presented an instrument for the treatment of hemorrhoids by crushing, but owing to the unfortunate mechanical construction of the instrument it never came into very general use. We have employed the angiotribe in several hemorrhoid operations with entire satisfaction. The operation is very quickly done without hemorrhage and the scar tissue formed lies parallel with the axis of the bowel, a distinct advantage in all hemorrhoid operations. With two instruments, we have been able to complete a hemorrhoid operation in ten minutes without loss of blood or the use of a ligature.

More recently the angiotribe has been used for crushing the pedicle in the operation for castration in the male and proved entirely satisfactory.

Angiotripsy presents distinct advantages in the control of hemorrhage. Out of a considerable experience, it has proved a satisfactory method, and with care in its use it will find a wider application. It solves the problem in many respects of the control of hemorrhage in conditions where we have been debating the utility respectively of silk or catgut.

LIST OF OPERATIONS FOR QUARTERLY SURGICAL SERVICE IN THE ALBANY HOSPITAL, JULY-OCTOBER, 1899.

Skull,		Jaw,	
trephining for fracture	2	necrosis	2
for tumors of brain	2	carcinoma excision	2
for mastoid abscess	1	wiring for fracture	2
Scalp, lacerated wounds	2	Tongue, angio-papilloma, galvano-	
Pharynx, removal of carcinoma,		cautery	1
galvano-cautery	2		

Face,		Amputation of penis, partial	1
lacerated wounds	1	hypospadias, plastic	2
epithelioma of lip	1	paraphimosis	1
epithelioma of nose	1	circumcision	8
epithelioma of ear	1	excision Venereal Sore	1
Lupus, curettement	1	perineal section	1
Cyst	1	Scrotum,	
Nose, deviated septum	2	hydrocele	2
Neck,		varicocele	2
tubercular adenitis, excision	5	castration	
thyroidectomy	1	Inguinal glands, excision	2
resection of brachial plexus for		Uterus,	
neuralgia	1	Porro operation	1
Arm,		hysterectomy, abdominal	3
amputation	1	hysterectomy, vaginal	10
osteotomy at elbow for anchy-		uterine polypus	2
losis	1	central fixation	2
Wrist, lacerated wound	1	dilatation, curettement	30
Hand,		Cervix,	
local periostitis	1	amputation	1
cellulitis, incisions	1	trachelorrhaphy	11
needle, extraction	1	Ovaries and ligaments, vaginal	
Fingers,		section for pyosalpingitis	2
amputations	7	Excision of appendages,	
necrosis of humerus	1	single	8
Chest,		double	7
paracentesis	2	Vagina and perineum,	
resection of ribs	3	perineorrhaphy	3
sub-diaphragmatic abscess	1	excision glands of Bartholin,	
Breast, amputations	13	(double)	2
Abdomen,		rectum and anus, fistula in, and	
gastrostomies	2	excision	2
colostomies	1	hæmorrhoids	1
appendectomies	33	polypus, rectal	1
abdominal wall, sarcoma of, ex-		abscess, ischio-rectal	2
cision	1	Coccyx,	
Hernias,		excision for neuralgia	1
inguinal	3	excision for necrosis	2
central	2	excision with dermoid cyst	1
umbilical	1	Sacrum, necrosis, sequestrotomy	1
Genito-urinary,		Leg,	
kidney,		lacerated wounds	1
nephrectomy	2	varicose veins	1
nephrotomy	4	osteo-myelitis femur, Volkmann's	
nephrorraphy	1	operation	1
cystocele	2	Knee,	
prostatectomy	2	fracture patella, wire suture	3
urethrotomy, internal	5	erasure for tubercular synovitis	3

sarcoma, excision	1	Tibia and fibula, compound	1
amputation, double	1	Fibula, compound	1
Foot,		Radius and ulna	2
amputations, partial	6	Ulna	1
foreign bodies removed	2	Radius, Colles	2
ingrown nails, evulsion	2	Humerus	2
		Clavicle	2
Total number of operations	257	Maxilla, inferior	3
FRACTURES.		Total	28
Femur	4	DISLOCATIONS.	
Patella	2	Shoulder	4
Tibia, compound	3	Elbow	2
Tibia, simple	2	Metacarpal, compound	1
Tibia, ununited	1		
Tibia and fibula	2	Total	7

Correspondence

VIENNA LETTER.

VIENNA, *October 28*, 1899.

On Sunday, the twenty-second of October, the statue of Dr. Hermann Müller was unveiled. This memorial is erected in front of the entrance to the Klinik Nothnagel, in the eighth court of the Allgemeine Kraukenhaus. There was a large attendance, including several high city officials, most of the University professors and students, and a number of army officers who honored the memory of this young physician by their presence. The unveiling speech was made by Professor Nothnagel, who made many touching references concerning the life and sacrifice of Dr. Müller, who was the first assistant in his clinic. In the course of his remarks, turning to the students, he said: "Here in the sight of the place where you strive for scientific perfection, this monument stands as a shining example that it is not intellectual attainment alone that stamps the true man, but first of all moral force and development and strength of character. Reminding, uplifting, and inspiring, may it influence the succeeding generations." The director of the Hospital made some remarks and referred to Dr. Müller's having lived up to the honorable

traditions of the Hospital. An impressive address in closing was made by one of Dr. Müller's warmest friends, who is an assistant in the clinic.

The statue is a life size bust in bronze mounted on an artistic marble pedestal. In front is a bronze bas relief, representing Marcus Curtius on horseback leaving Rome for her deliverance and waving farewell to his fellow citizens as he rides forth to his death. An inscription brings out the comparison. "Marcus Curtius opfert sich selbst, um seine Vaterstadt vor dem Verderben zu retten." The circumstances of Dr. Müller's death may not be familiar to all the readers of the ANNALS, and as they are most interesting, I may be pardoned for going into some of the details.

In the summer of 1898, the Austrian Government sent a commission, including Drs. Müller, Albrecht and Gohn, to India for the purpose of studying the plague. They succeeded in obtaining pure cultures of the plague bacillus. Dr. Müller had a number of these cultures in his laboratory in the Klinik Nothnagel. About the middle of last October, the diener who took care of this laboratory was taken sick at his home and Dr. Stejshal, an assistant in Professor Neusser's division, who lived close by, was called in. As there was an epidemic of influenza in Vienna at this time, the case was diagnosed and treated as such. Dr. Müller, hearing that his diener was sick and being treated by a physician in the rival clinic, had him taken to a private room in Nothnagel's division. A specimen of the sputum was sent to Dr. Gohn of the bacteriological department who found the plague bacillus. Dr. Müller would not believe the man had the plague, but all doubt was removed when the man died the next day and the autopsy made by Dr. Albrecht, proved conclusively the man had died from the pest. Dr. Müller was convinced by this time, and realizing the responsibility he had incurred by bringing this man into the Hospital, he shut himself up in the plague stricken room and with the help of a nurse who had cared for the sick man, he scraped and cleaned the walls, ceiling and floor and painted the room. Dr. Müller and the nurse went out to the pest hospital where they both died. These three were the only deaths from the plague. The excitement that reigned in Vienna at this time on having the

plague in their midst and especially in the old germ saturated Allgemeine Spital, was intense. The people in the vicinity were panic stricken and many fled from the city. The advisability of burning the entire Hospital was seriously considered. It was found that the diener was stupid and careless and in spite of many warnings had broken a culture tube and had not reported it. There is no doubt but that the prompt and heroic action on the part of Dr. Müller in cleaning and disinfecting the room, prevented what would have been a widespread and fatal epidemic.

There are many versions of this affair and the above account was related to me by Dr. Stejskal. His escape from the disease was miraculous. When he first saw the patient, in order to examine the throat he used his forefinger as a tongue depressor and without washing, rolled and smoked a cigarette. Of course no one dreamed of the plague. When the true nature of the case was known, Dr. Stejskal was sent out to the Pest Hospital and all his personal effects burned. He was in a somewhat nervous condition but fortunately did not contract the disease. The city authorities enacted a law at the time which is still in effect, which prohibits the growth, culture, or possession of the plague bacillus in Vienna.

Professor Kaposi was the first to describe, over twenty-five years ago, what he called xeroderma pigmentosa and the entire number of cases reported since that time have been less than one hundred. There are now in his wards three cases of the rare condition, which I have had the pleasure of examining. The three patients are sisters, the younger being about seven years old. The whole body, but face and hands especially, are so covered with pigment spots that on first glance one would take the children for negroes. The peculiarity of this disease is its early termination in multiple carcinoma. The skin atrophies and an eczema ensues, followed by ulceration which takes on a malignant form. All of these cases have a number of malignant growths on the face especially and have all had epithelioma removed. Last night I had the opportunity of hearing Professor Kaposi demonstrate these cases before the Vienna Medical Society. At this meeting he showed some cases in which ulceration

had followed the employment of Roentgen Rays for removing superfluous hair. He strongly condemned this practice and said the "Rays" should never be used as a therapeutic measure. The ulceration and pigmentation produced by it do not yield readily to treatment. Professor Kaposi is an interesting lecturer and excellent teacher. His clinic is always crowded and conspicuous in the front row are two woman physicians, who hail from Boston.

On Monday morning, October 16th, the new Physiological building was formally opened. This is an imposing looking structure situated next to the Anatomical building on Wahringer Strasse, not far from the Hospital. The laboratories are fully equipped with modern appliances and as an American said to me, "It looks more like our laboratories at home than anything I have yet seen over here." The antivivisectionists are not in power in Vienna and an important and specially arranged department has been built for the animals, and also a hatchery for frog spawn, etc. The much renowned Professor Schenk has his embryological laboratory in this building.

An almost universal teaching is that primary carcinoma of the liver is so rare as to be practically excluded, yet in the past three months Dr. Albrecht has demonstrated specimens from four or five such cases. Professor Neusser showed a case in his clinic last week, in which he made that diagnosis and said this condition is more frequent than generally recognized. It develops in a cirrhotic liver and its histological form is generally that of an adeno-carcinoma. The liver is greatly enlarged and icterus is present. If the spleen is enlarged it is due to the cirrhosis of the liver. An account of two of these cases with autopsies will shortly appear in the *Wiener med. Wochenschrift*. Dr. Albrecht demonstrated a very interesting liver which was enormous, weighing about nine pounds and was quite a pathological museum. The first lesion was a cirrhosis and upon this was grafted a primary adeno-carcinoma. This liver also contained an old echinococcus cyst.

Not many years ago, Ehrlich's diazo-reaction was considered pathognomic of typhoid and when it was shown to be fallible and confidence in it shaken, the agglutination phenomenon

was discovered by Widal. Will this test also sink into disrepute? At the Franz Joseph Spital this past year Dr. Krovacs, one of the best diagnosticians in Vienna, has had two cases in which it failed. One was an undoubted typhoid in which repeated trials were made, but no agglutination, observed. In the other case the test was typical, but the autopsy revealed an acute miliary tuberculosis. In the pathological department, Dr. Albrecht has shown us unmistakable typhoid ulcers from a case in which the Widal test was negative. Recently I have seen a case diagnosed as typhoid in Professor Monti's Children's Hospital, in which they were enabled to obtain the reaction. Professor Nothnagel claims that one test is not enough and that a number should be made. If in a number of trials where the reaction is positive, with increasing dilutions as the disease progresses, one can safely render a diagnosis of typhoid. *Exceptio probat regulam*, which rightly translated reads exception *tests* the rule, and in course of time the true importance of the Widal reaction will be recognized.

H. L. K. SHAW.

Editorial

Reception Wards for the Insane

With the enactment of the so-called "State Care Act," in 1889, the State of New York assumed the care of all dependent patients, legally adjudged insane, and the State was divided into eleven districts in each of which is located a State hospital for the care and treatment of the patients residing in the district. This arrangement has been perfected as far as conditions permit, to secure accessibility, not only to patients but to their friends, who may wish to keep in touch with the progress of the case. It is intended to provide prompt and proper treatment for the insane in accordance with the requirements of modern practice, and the results have been, in great measure, satisfactory. There remains, however, a serious defect in the plan. No statutory requirement exists as to the management of the patient during

the process of commitment, and pending transfer to the hospital. In some counties, notably New York, and Kings, the local authorities have provided so-called "detention" or "reception" buildings or wards in connection with existing general hospitals, where the patient's claims, as an invalid, receive full consideration. Throughout the rest of the State the insane patient is cared for by friends as best they can, or is placed in jail or some other convenient receptacle. The hardship of this is at once apparent, and in the more active cases, where exhaustion is rapid, consignment to a jail or other "lock-up" results not only to the detriment of the patient's recovery, but even of his life.

The experience of the reception wards for the insane at Bellevue Hospital in New York, has been especially instructive. It has been found that many patients sent there have improved so that subsequent transfer to the State hospital has not been necessary. Such results emphasize the importance of similar arrangements in other districts of the State, and especially in the larger cities. In Albany a movement is on foot to secure an additional pavilion for the Albany Hospital to meet this want in behalf of the insane. The Hospital, with trained nursing service of the best, and new and most complete equipment, is well adapted for this extension of its legitimate field of work. It is anticipated, for a special pavilion to be erected for the insane, that it will furnish transient accommodation for insane patients committed to a State institution, for patients who need observation before the advisability of commitment to the State institution is determined, for mild cases of insanity who may recover in a general hospital, and for a certain doubtful contingent, especially alcohol and drug habitues, who are in great measure irresponsible, but decline to enter a hospital for the insane, and are not recognized by the law.

The subject has been presented to the Board of Supervisors of Albany County, now in session, with the hope that they will authorize the construction of such a building, not only in recognition of the present state of medical opinion regarding the treatment of the insane, but in the interests of the community and of humanity.

In Memoriam

MARTIN LUTHER MEAD, A. M., M. D.

The subject of this sketch was born in Cornwall, Vt., January 23, 1834, and died at Highlandlake, Colo., September 5, 1899, of tuberculosis of the brain, after an illness of eight years.

Dr. Mead fitted for college at Flushing, L. I., and graduated from Middlebury College, Vermont, in 1855. He was invited back by the faculty to take the chair of Chemistry and Natural Sciences, but declined, as he had decided to study medicine. He taught in the Collegiate Institute at Poughkeepsie, N. Y., and in Phillip's Academy, Andover, Mass., 1855-'8, and entered the Albany Medical College in 1858, graduating in December, 1859. In January, 1860, he commenced the practice of his chosen profession, entering into a business partnership with Dr. Freeman, in his office at Albany, continuing with him until May, 1863.

In July, 1862, he entered the army as contract surgeon. He was ordered to headquarters of the army of the Potomac, then at Harrison's Landing, and was put in charge of the 4th regiment, Michigan infantry, just after the seven days' battle before Richmond, the whole surgical staff being absent on account of sickness. The condition of the men was appalling, but with characteristic courage and self-sacrifice he threw himself into the work of alleviating human suffering. He was twice under fire—when the camp on the James River was shelled at night and in the second battle of Bull Run. In October, sickness compelled him to leave the service.

In May, 1863, he removed to 141 North Pearl street, Albany, where he commenced practice by himself and continued till May, 1869. He was married to Miss Hannah W. Treadwell, daughter of John G. Treadwell of Albany, N. Y., May 19, 1863. She was suddenly removed from her husband and family by a fatal accident, September 5, 1864, leaving an infant daughter three months old. This great sorrow cast a shadow over his whole subsequent life. On January 23,

1867, Dr. Mead was married to Miss Myra M. Jenkins, of Conway, Mass., to whom were born four sons.

In September, 1871, he removed to Cleveland, Ohio, where he resided twelve years and practiced medicine. He was connected with one of the medical colleges as lecturer on chemistry two years of this time. For health reasons, he removed to Highlandlake, Colo., in 1883, where he continued his practice till his health would no longer permit. During the last two years of his life he was helpless and deprived of the power of speech. He met the verdict of the counsel who declared his case hopeless from the outset, with the same heroism that characterized his whole life. He exemplified the fact that an active practitioner of medicine may live a faithful, Christian life.

There can be no better testimonial of his life than this, which has recently come from one of the families he attended in Cleveland:

"How he exemplified the faith that makes faithful; how he stimulated and educated the spiritual life in us all, adorning the doctrine of our Lord and Savior with all the graces of his brilliant and cultivated mind. I well recall many times, too, when in the exercise of his profession he was a veritable angel of mercy in our house."

DANIEL D. DONOVAN, M. D.

Dr. Daniel D. Donovan, who died October 27, 1899, in Troy, was born in that city November 5, 1875. He was educated in the public schools and the La Salle Institute, from which he graduated in 1892. After spending one year in the medical department of Syracuse University, he entered the Albany Medical College in 1893, graduating with the class of 1895.

Shortly after graduating he was appointed interne at the Troy Hospital, which position, as well as that of Gynecologist in the Out-Patient Department, he held until January of the present year, when he was compelled by illness to relinquish his position. After spending several months at Asheville, he went to the Gabriell's sanitarium in the Adirondacks in the vain hope of regaining his health. Leaving there, he started

for Denver, but after reaching St. Louis he was compelled to give up and return home, where his death occurred October 27. Few of the younger physicians of Troy were more widely or favorably known. For the past three years he has held the office of police surgeon, and received the democratic nomination for coroner in 1897.

Medical News

Edited by H. Judson Lipes, M. D.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.—Meeting held November 15, 1899, in Alumni Hall. The following members were present:

Drs. Archambault, Bartlett, Blumer, Case, Classen, Cook, Curtis, Dawes, Featherstonhaugh, George, W. H., Hailes, Happel, Lipes, MacFarlane, Mitchell, Moore, Mosher, Moston, Neuman, Peltier, Robinson, Root, Sabin, Thompson, Trego, Van Allen, Vander Veer, Wansboro, Ward, Wiltse, Winne, Ackert.

Meeting called to order at 9. P. M., the President in the chair.

1. Reading of minutes of last regular meeting.—The minutes of the last regular meeting (semi-annual) were read and ordered adopted as read.

2. Reading of minutes of special meeting.—No special meeting had been held.

3. Reception of reports of officers and committees.—No reports had been presented.

4. Election of members.—Dr. Blumer proposed the name of Dr. Edgar A. Vander Veer. The application of Dr. Vander Veer was referred by the President to the Board of Censors.

5. Motions and resolutions.—None were presented.

6. Miscellaneous business.—Under this head the following letter from Mr. Geo. I. Bailey was read:

To Dr. H. S. PEARSE,

Secretary, Albany County Medical Society, Albany, N. Y.

November 9, 1899.

DEAR SIR.—The board of water commissioners invite your society to visit and inspect the new filter plant on Saturday afternoon, November 18th, between the hours of 1 and 5 P. M.

The plant as completed covers twenty acres of land, is the largest water purification plant in the United States, and the most perfect in the world. It has been established after two years of energetic work at a cost of \$500,000, and its operation will give to Albany as pure and healthful a water supply as any in the world, and thereby remove the blight on our city's growth that has been due to an acknowledged impure water supply.

At the time named an opportunity will be given to see the plant in all its details, and the operations of scraping a filter, washing the sand, and the other interesting methods of operation can be fully examined.

The most convenient route to the work is by trolley car to North street, North Albany, and a short walk easterly brings you to the site of the plant.

Yours truly,

GEO. I. BAILEY, *Secretary*.

Dr. CURTIS: I move that Mr. Bailey's invitation be accepted, and that Mr. Bailey be thanked for his invitation. Motion was seconded by Dr. WARD and carried.

Dr. CURTIS further said: I think this occasion is so important that it ought to be taken advantage of by all the members of the society.

The President then read the following letter from Mrs. James O. Merritt:

KINGSTON, N. Y., *November 6, 1899.*

Dr. T. F. C. VAN ALLEN

DEAR SIR.—I am sorry to trouble you, but you wrote me in June that the Medical Society of the County of Albany did not hold its meetings until October. If the society then met did it accept the portrait of my father, Jacob Lansing Van Deusen? My sister, Marie Van Deusen, and I sent it in May.

Sincerely yours,

MRS. JAMES O. MERRITT.

The President remarked that the portrait had been received early in the year and that he thought something should be done.

Dr. MACFARLANE moved that the secretary be directed to return thanks to Mrs. Merritt. Seconded; carried.

7. Reading of papers.

The President then remarked that the reading of papers was the next business in order, but that Dr. Harvie wished to exhibit his patient so that she could return home in good season.

Dr. HARVIE presented his patient suggesting that any of the members so desiring should question her.

Dr. ARCHAMBAULT then read his paper, "A Report of a Case of Round Ulcer of the Stomach, with Presentation of Post-mortem Specimen."

The President suggested that as both papers were on the subject of the stomach, the discussion should be delayed until after Dr. Harvie had read his paper. It was so ordered.

Dr. HARVIE then read his paper, "Report of a Case of Total Gastrectomy; Recovery; Presentation of Specimen and Patient." He then read extracts from the papers by M. H. Richardson, of Boston; Brigham, of San Francisco, and Schlatter, on the same subject. He also read a pathological report on the specimen.

The President declared Dr. Harvie's paper open to discussion.

Dr. VANDER VEER: I wish to propose a vote of thanks to Drs. Archambault and Harvie for their valuable papers. Seconded; carried.

I wish to briefly discuss several points in these papers. Dr. Archambault brought out many points in keeping with the subject. A serious responsibility rests on both the physician and the surgeon to arrive at an early diagnosis in these cases. The newer methods of stomach examina-

tion have led to great advances in this respect and we should be encouraged by the fact that we are now able to reach a diagnosis much earlier than we used to. Regarding pain in these cases, I consider severe pain just before vomiting as a most important diagnostic point in ulcer and cancer and where other means have failed I regard this as an indication for operation. I have been impressed at autopsies with the differences between the cicatrices following gastric ulcers in different cases. In some cases very small cicatrices are present where there have been very marked symptoms during life. In other cases there are very extensive bands of adhesions. I think that ulcers on the posterior wall or near the smaller curvature are apt to result in the most marked adhesions. The cases where the anterior wall is attacked are most apt to be fatal, but when they recover the adhesions are usually slight. I think that all long-standing cases, not yielding to medical treatment, should be explored. In cancer cases the earlier they are explored the better. I still make use of nitrate of silver and feel sure I have seen good results. Dr. Harvie is to be congratulated upon his good result in his case and upon his perseverance in going ahead in the face of such unfavorable circumstances. I remember years ago remarking before this society that I had seen a stomach post-mortem which I thought could have been removed with benefit to the patient. I have operated twice in the last two years in the hopes of removing pyloric stenosis, but was unable to do much in each instance on account of adhesions to the spinal column. In one case I did an anastomosis and the patient lived comfortably for fourteen months. In Dr. Harvie's case he certainly had a marked amelioration. These cases lead a miserable existence and we can certainly benefit them by surgical intervention. In such a case as Dr. Harvie's I should feel reluctant to use the Murphy button; I would think it safer to follow the procedure used by Dr. Harvie, as I would be afraid of the effect of feeding the patient through a Murphy button. There are many other points which might be discussed. It takes a great deal of will power to go on and overcome the difficulties in such a case. I congratulate Dr. Harvie.

Dr. NEUMAN: On account of the lateness of the hour I will only refer to one or two points. One point which has impressed me with regard to gastric ulcer is the frequency of hyperchlorhydria, i. e., increase in hydrochloric acid. I regard this as a causative factor. The examination of the gastric contents is of great value in these cases—it increases the probabilities of making a correct diagnosis. It should be used in every case. The referred pain in the back whilst not rare is not so common that its absence should exclude the diagnosis of gastric ulcer. I saw last year a case of gastric ulcer with hyperchlorhydria where the examination of the gastric contents showed a very high degree of acidity. There was no hematemesis. The case did well under large doses of alkalis. The gastric symptoms disappeared. The case died last summer from pneumonia. On examination of the stomach there presented evidences of a healed ulcer on the posterior wall.

Dr. WARD: I wish to congratulate Dr. Harvie. Dr. Archambault's case reminds me of a case I saw. I think, without doubt, the tumor in

Dr. Archambault's case was due to curdled milk in the sacculated portion of the stomach. The case I referred to presented, at one time, upon examination, a large tumor, the patient vomited just as I left, the nurse called me back and pointed out that the tumor had disappeared. The vomitus consisted of curdled milk. I agree with Dr. Archambault regarding the use of nitrate of silver.

Dr. MACFARLANE: Dr. Archambault's case is very interesting. The diagnosis seems easy with the specimen before us, and Dr. Archambault's history, but it might have been very different during life. We must not expect too much in the way of symptoms in gastric ulcer. The so-called "Triad" is often not present. Many cases should be treated as cases of gastric ulcer merely on suspicion, especially cases with localized pain after food or during the night. This suggests irritation of an ulcer always. Hyperacidity is of course the result, and not the cause of the gastric ulcer. It is caused by the irritation of the ulcer leading to contraction of the stomach as a protective measure. This leads to retention of food and hypersecretion. The characteristics of the pain are that it occurs both after eating and on an empty stomach, in the latter case being due to the hyperacid secretion. The lack of dilatation in Dr. Archambault's case is not remarkable. Dilatation when it occurs in these cases is always due to cicatricial contraction. During the acute stage the patient avoids food and there is no dilatation. The dilatation only occurs when the ulcer contracts, *i. e.*, when we have fibrous contraction. Another characteristic of the pain in ulcer is that it changes with change in position, this is because the change causes the irritating stomach contents to run over the ulcer. Nitrate of silver is undoubtedly of great use in these cases. Another valuable drug is bismuth. It must be given in very large doses to get the desired effect. Give three to six grammes at a time. Fleiner pours very large quantities in through a stomach tube and has the patient lie in such a position that the bismuth lies over the ulcer as nearly as he can judge. After the failure of medical treatment surgery often produces the most marvelous results.

I must congratulate Dr. Harvie. He ought to be a very proud man, for he has certainly done something to be proud of. The diagnosis of cancer of the stomach is often very difficult. One must operate early and in order to do this we must make an early diagnosis. It is claimed by some authors that we should always feel a tumor before operating. I do not feel sure that this is necessary. If you have a dilated stomach you are pretty sure to be dealing with either a cancer or a cicatrized ulcer; in the former case the stomach should be removed, in the latter case a gastro-duodenostomy may be performed. Even in cancer, surgery has accomplished marvellous results. V. Eiselberg reports one case where the patient lived five years after a gastro-duodenostomy. These cases do not progress very rapidly. Do we need a stomach? There are individuals who practically do not possess one. These are people whose stomach mucosa does not secrete either hydrochloric acid or pepsin. As long as the motility of the organ is unimpaired there is no difficulty in these cases. The changes in the food in these cases as shown by examination of the feces, shows that they differ from normal only in that the small fish bones, etc., are not digested.

A Danish observer thinks that these cases show that we do not need such powerful digestive fluids nowadays. In prehistoric ages when man ate bones and such articles of diet he needed a secretion strong in hydrochloric acid, but now our food is almost predigested and we do not need these. This is, of course, only a hypothesis.

Dr. CURTIS: In connection with Dr. Archambault's case I would refer to a patient whom I saw a number of years ago illustrating the difficulties of diagnosis. The case was an old lady who had gastric symptoms of long standing. I had her under close observation. She had over a period of some months a series of severe hæmorrhages. This was the main symptom from which she eventually died. The diagnosis was masked. The autopsy showed that there had been an ulcer which had healed, and in its vicinity there had occurred an aneurism of a gastric artery the size of a marrowfat pea; a slit had occurred in this from which the hæmorrhage came.

Dr. BLUMER: I wish to speak concerning one point in Dr. Harvie's case. You, no doubt, noticed that the first symptoms occurred two years before the operation, and this would have been a long time for a pure carcinoma of the stomach to have gone on without metastases to the liver. I think from the nature of the lesion, its ulcerative character, and the great thickening of the peritoneum over it, that it was originally a gastric ulcer. It had the naked eye appearance of one, but microscopically it was undoubtedly carcinomatous. I regard the case as one of carcinoma grafted on an old gastric ulcer. This is not so very uncommon, there are several such cases in the literature.

Dr. HARVIE, in closing, referred to the interest he had taken in Dr. MacFarlane's intelligent remarks on pyloric obstruction. He had seen in the last year four such cases, and had operated upon three. They all resulted from healed gastric ulcer. The ordinary symptoms of dilatation were present. In three cases he did a gastro-enterotomy. He cut through the stricture and the upper part of the duodenum, and by sewing up the incision, after rendering it transverse, made the opening larger. The cases had been most satisfactory. The patients reacted well and the relief had been quite lasting. In one case the opening before operation had only been large enough to admit a lead pencil, improvement began immediately after the operation and the patient was as well as ever. There is no class of cases in which such brilliant results can be obtained.

Dr. MOSHER: I wish to call the attention of the society to a resolution which is to be introduced at the next meeting of the board of supervisors relative to the building of a retention ward for insane patients, in connection with the new Albany hospital. I will briefly review the history of the present condition of the patients. In 1889 the State Care Act was passed, which removed the patients from the charge of the county authorities and placed them in the State hospitals. The State Commission in Lunacy was founded at the same time. As a result of this it often happens that several days must elapse between the patient's commitment and his removal to a hospital. This has led to a great abuse as the patient is often kept in jail during the time without medical treatment, and under such unfavorable

circumstances that the subsequent course of the case is badly influenced. There should be a retention ward for these cases. There is no need for me to cite cases. You all know of them. Some cases would recover in such a ward without being sent to a State hospital. Some cases also which are not bad enough to be committed could be sent there for treatment. The State Lunacy Commission are willing to have such a ward built, and the trustees of the Albany hospital are also willing, I can remember two cases now—one in which the patient died in jail, and the other a physician of over seventy who became delirious. The only place for him was the jail. These cases illustrate the barbarity of the present system.

Dr. MITCHELL: I coincide with Dr. Mosher in this. I would suggest that each member of this society forms himself into a committee of one to call on his supervisor and urge the matter upon him.

Dr. ARCHAMBAULT: I agree with Dr. Mitchell. A case of this sort came under my observation last Friday. The man had cut his throat while temporarily insane, and he recovered from this but relapsed. He was examined last Friday but could not be taken to Poughkeepsie until to-day (Wednesday). We should think of the ultimate recovery in these cases. This jail treatment is in some cases enough to compromise it.

Dr. MOSHER: Dr. Mitchell has said what I wished to say regarding the Supervisors. I move that the Society express its sense of approval of the plan of providing for the insane in this way.

The PRESIDENT: I understand the motion to be,

Resolved: that the Medical Society of the County of Albany expresses its approval of the plan to create a detention ward for insane patients in connection with the Albany Hospital, and directs that a copy of this resolution be transmitted to the President of the Board of Supervisors. Seconded. Carried.

The meeting was moved and seconded to be adjourned.

GEORGE BLUMER, *Secretary*.

T. F. C. VAN ALLEN, *President*.

NEW YORK ASSOCIATION OF RAILWAY SURGEONS.—The ninth annual meeting of this association was held at the Academy of Medicine, New York city, on Thursday, November 16th, under the presidency of Dr. Theo. D. Mills, of Middletown. The special topic considered was "Physical Fitness of Railway Employees."

UTICA HOSPITAL SUPERINTENDENCY.—As a result of the civil service examination held at Albany, on October 16th, for the appointment of superintendent for the Utica State Hospital, the following candidates are eligible, ranking in the order named: Harold L. Palmer, State Hospital, Utica; Henry P. Frost, State Hospital, Buffalo; William L. Russell, State Hospital, Willard; J. Elvin Courtney, Hudson State Hospital, Poughkeepsie. The appointment of Dr. Palmer has since been made.

HOSPITAL SHIP FOR BRITISH SOLDIERS FURNISHED BY AMERICAN WOMEN.—The Atlantic Transport Company has loaned the British government,

without charge, the ship "Maine" as a hospital for use in South African waters. The American women of England proposed to equip this steamer and the British government, on October 27th, gratefully accepted the offer. The "Maine" has already been equipped and has left for the scene of war.

OFFICERS OF THE NEW YORK MEDICAL ASSOCIATION.—The following officers were elected to serve for the ensuing year: President, Dr. E. D. Ferguson, of Troy; vice-president for the first district, Dr. Charles H. Glidden, of Little Falls; vice-president of the third district, Dr. J. M. Farrington, of Binghamton; vice-president of the fourth district, Dr. W. H. Thornton, of Buffalo; vice-president of the fifth district, Dr. J. C. Bierwirth, of Brooklyn; treasurer, Dr. E. H. Squibb, of Brooklyn; secretary, Dr. M. C. O'Brien, of New York city.

CREMATION OF PAUPERS IN PARIS.—In the issue of the *Progrès Medical* for the 1st of July, 1899, Bourneville has an article announcing that the municipal council of Paris has decided to remit the tax on cremation of the bodies of those dependent on the municipality, as inmates of public hospitals and pauper institutions. The author says incineration is demanded by public hygiene and rejoices at this mark of its advancement; that its importance for all large cities is considerable and is now a progressive interest.

THE DEATH OF WILLIAM H. APPLETON.—On October 19th the death of William H. Appleton, senior member of the firm of D. Appleton & Company, occurred in New York. He was in the eighty-sixth year of his age. Although Mr. Appleton had not been active for some time past he was for many years one of the prominent factors in bringing American book publishing to its present high level. To him is due the credit of giving noted impulse to the popularization of scientific facts and discoveries. In the medical world his firm is known more especially as the publishers of the *Popular Science Monthly*, the *American Gynecological and Obstetrical Journal*, and the *New York Medical Journal*.

THE RULES AND REGULATIONS OF THE THIRTEENTH INTERNATIONAL CONGRESS OF MEDICINE TO BE HELD IN PARIS, AUGUST 2-9, 1900.—All doctors of medicine may become members of this Congress by making the proper application and paying five dollars. The secretary-general in Paris has instructed the American national committee to receive the applications of American physicians and to return a receipt for the amounts sent. These applications and the money are then to be forwarded to Paris, and in due time cards of admission to the Congress will be distributed to all subscribers. Members desiring to present papers will forward them to the secretary of the section to which they belong, for each sectional committee reserves the right of drawing up its own working program.

CONTENTION OVER LOOMIS LABORATORY.—The New York University Medical School has brought suit against the Cornell Medical School to compel the latter to grant the students of the former school the privileges of the Loomis Laboratory. In 1897 there was a split in the medical faculty of the New York University (the institution which had previously

controlled the Loomis Laboratory), the greater part of the faculty joining the Cornell University Medical School which was originated at that time. Since the Cornell school was established the Loomis Laboratory has been used by the students of that institution. The New York University has tried to obtain the use of the building but could not do so; hence the suit. The decision of Justice Truax, before whom the case was tried, has not yet been announced.

A REMARKABLE ACCIDENT.—In *Laryngoscope*, October, 1899, Dr. J. W. Bird reports the case of a young man, aged 24, who, while running across a dark yard ran into a wire clothes line. The wire caught in his teeth, threw him to the ground and tore out nearly all of the left superior maxilla with eight teeth. The dimensions of the bone were as follows: External surface, $2\frac{1}{2}$ inches; height, $1\frac{5}{8}$ inches; depth, 1 inch. The left half of the roof of the mouth, the floor and outer wall of the nasal fossa were removed with the bone. The Schneiderian membrane and periosteum, lining the fossa, were not ruptured, so that the nasal passage was normal. The line of fracture was through the antrum of Highmore, and at the lower margin of the infra-orbital foramen. The unusual feature of the case was that there was no perceptible scar or deformity of the face.

DEATH OF DR. WOODBRIDGE.—On November 3d the death of Dr. Luther Dana Woodbridge, professor of anatomy and physiology in Williams College, was announced. He was forty-nine years old. Graduated from Williams College in 1872, he became an instructor in Robert College at Constantinople for a year, and returned to Williams College to take the position of instructor of gymnastics. Shortly afterwards he went to the New York College of Physicians and Surgeons, and after his graduation served as interne in the Roosevelt Hospital. After a course abroad, he accepted the chair in Williams College, which he has held since 1884. Besides his work in Williams, he lectured in the Boston College of Physicians and Surgeons on "The Nervous System and Its Diseases."

TROPICAL MEDICINE.—In the issue for the 15th of July, '99, of *Le Progrès Medical*, Blanchard has an interesting article on the "Teaching of Tropical Medicine." It begins by praising Great Britain's establishment of the London School of Tropical Medicine, and the five hospitals and societies allied with it, furnishing 275 beds for patients who may constitute the students' clinical material.

Two dispensaries, which are polyclinics, are also among the resources of this school's students. The author takes it for granted that bacteriology and parasitology are the most important subjects that can occupy the attention of students in such a school. The instruction includes all sides of the many questions concerning tropical pathology and hygiene. Students familiarize themselves in the most complete way with methods of examination not only of blood, urine and other excreta, but of various organs and tissues, in a fresh state, prepared with divers reagents and for microscopic examination. More than half the article is devoted to British schools of this sort, of which four are mentioned, the one already named and those at Liverpool, Aberdeen and Edinburgh. The Liverpool institution is named

the School of Tropical Diseases and Animal Parasitology. It has associated with it the University College and the Royal Southern Hospital. The students learn concerning the blood, to determine its colorimetric power, the number of globules, its specific gravity and coagulability. Then comes the study of the hæmatazoa, among which, of course, that of malaria occupies first place. The curriculum could not be praised too much. Germany, Italy, the United States of America and France have done some similar work. The American school is to be at Johns Hopkins and devoted specially to diseases prevailing in Cuba, Porto Rico and the Philippines. France was the first to teach tropical medicine and does not propose to be beaten, in this scientific race, by its neighbors across the channel. The medical corps of the civic hospital at Mustapha, Algeria, is much blamed as having been the sole opponent of instruction in tropical medicine.

PERSONAL.—Dr. Alvah Harry Traver (A. M. C. '98) has been appointed attending surgeon on the staff of the Child's Hospital, Albany, N. Y.

Dr. Edward L. Hanes (A. M. C. '99) has been appointed medical interne at the Craig Colony, Sonyea, N. Y.

MARRIED: PARISH-VAN ZANDT.—At Maryland, N. Y., Wednesday, October 21, 1899, Dr. Charles E. Parish (A. M. C. '96) and Miss Emilie Hudders Van Zandt.

Current Medical Literature

MEDICINE

Edited by Samuel B. Ward, M. D.

Angio-Neurotic Œdema Involving the Tongue and Lower Lip.—C. G. KERLEY (*Archives of Pediatrics*, October, 1899,) was called to see a two-year-old boy who was supposed to have been poisoned. Some hours before the patient was seen, the nurse maid had given a teaspoonful of a cough mixture containing very small doses of muriate of ammonia and syrup of ipecac. Immediately after the medicine had been taken the tongue and lower lip became enormously swollen. They were swollen to several times their normal size, with the mucous membrane tense and reddened. There were no fever and but little prostration. A few typical areas of urticaria eruption were found upon the abdomen. A wet dressing of bicarbonate of soda solution was applied, calomel was given and the next day the child was as well as usual.

Acetanilid Habit.—In the 78th number of the *Philadelphia Medical Journal for 1899*, Dr. GILMORE, of Auburn, N. Y., has an article reporting a case in which acetanilid was used about twenty months in daily amounts of from 5 to 10 grains, combined with equal amounts of sodium bicarbonate. The patient was a widow, multipara, 58 years old, who had had rheumatism and heart trouble from childhood. For past three years had

had abdominal discomfort, sometimes amounting to pain. Felt weight in pelvis, aching in coccygeal region, had insomnia from pain, was constipated and bled from rectum. Carcinoma of cervix uteri. Powders, each containing $2\frac{1}{2}$ grains of each of the above named drugs, were prescribed for relief of nocturnal pains and one or two powders sufficed for this. Analgesic properties of such powders evident; no increase in amount of drugs for six months; then a like powder was added to the daily amount, this one being taken near the end of the day; this aggregate amount was continued for another half year. At length still another powder of the same kind was added to the daily amount. To prevent injurious cumulative effect, Dr. Gilmore sought to diminish amount of drugs; in vain; morphia and codein did not serve well as substitutes. During the last four months $\frac{1}{4}$ grain morphia sulphate, daily, was added. There were no adverse symptoms directly induced by the drug in question. Cancerous cachexia was to be expected. There were no sudden or marked change, no cyanosis and no mental aberration, as is said to occur in its prolonged administration. Finally there was œdema, beginning in the extremities, which gradually became general as the heart failed to respond to stimulation.

OBSTETRICS, GYNÆCOLOGY AND PÆDIATRICS

Edited by James P. Boyd, M. D.

Report of a Case of Anuria.—A. C. COTTON (*Archives of Pediatrics*, October, 1899,) reports an interesting case of a male child, who at birth weighed eight pounds, and presented upon examination no deformities or malformations. An analysis of the mother's urine, twenty-four hours' specimen, the day before delivery, showed the following findings: amber, slight turbidity, specific gravity, 1.026; no albumin nor sugar. At the end of twenty-four hours, as the child had not urinated, a surgical probe was introduced into the urethra and passed easily into the bladder. Hot sitz baths were given with hot fomentation to the supra-pubic region and lumbar regions, but with negative results. During the first eighty hours the child rested well; temperature ranged from 99° to 103.4° F. Hot tub baths, dry heat and internally, infusion of watermelon seeds *ad libitum*, calomel, tincture of hyoscyamus, fluid extract of triticum repens were tried without result. At the beginning of the fourth day the child began to have convulsions which were tonic in character, affecting the entire body, the respiratory muscles being principally involved. The convulsions became more and more frequent and gradually became clonic in character. Just before death they were almost continuous, and during the last twenty-four hours the child was in a deep stupor from which it could not be aroused.

Post mortem examination: Defective septum between pulmonary artery and aorta. Patent ductus arteriosus and foramen ovale. Cyanosis of skin. Fatty cirrhosis of liver (probably); uric acid infarction of kidneys; general infection with bacillus mucosus capsulatus. Pharynx, mouth, larynx, trachea and œsophagus normal. The heart presented a right ventricle which was much larger than the left, which was situated more behind

the right than usual. Stomach and intestines were normal. Pancreas normal. Uro-genital organs were normally situated. Bladder contained small amount of turbid urine. Mucous membrane around ureteral orifices was swollen and red. No dilatation of ureters or pelvis.

Histological examination: The lungs were the seat of extensive hæmorrhagic infarction, the alveoli and bronchioles in places being filled to distension. The liver was the seat of a marked passive congestion with fatty infiltration of the liver cells and some recent increase in the periportal connective tissue which was rather cellular. The cortex of the kidneys showed cloudy swelling of the epithelium of the convoluted tubules. In the medulla the uriniferous tubules were crowded with granular material which stained light blue with hematoxylin. Sections stained with methylene blue showed occasional encapsulated short bacilli here and there in all the organs, especially among the extravasated blood corpuscles and in the capillaries of the lungs.

A Consideration of Parenchymatous Inflammation of the Mouth and Tongue.—J. L. GOODALE in the *Annals of Gynecology and Pediatrics*, distinguishes four kinds of inflammation: (a) An acute parenchymatous inflammation of the mouth and tongue caused by streptococcus infection. (b) Parenchymatous inflammation caused by the diphtheria bacillus. (c) Purulent inflammation of the mouth and tongue, and (d) anomalies of the circulation or angio-neuroses.

A Case of Exophthalmic Goitre in which the Thyroid was Excised Under Cocaine.—By J. H. NICOLL, *Glasgow Medical Journal*, September, 1899. The patient was a woman, aet. 45, who was suffering from palpitation, dyspnœa, debility and throbbing in the head. She was anæmic, with slightly protruding eyeballs, and a pulse ranging from 90 to 110. There was an enlargement of the thyroid, both lobes and the isthmus. Cocaine was injected hypodermically and all of the enlarged right lobe and isthmus, and more than half of the left lobe were removed. The patient made a good recovery, and the dyspnœa on going up stairs is much less, pulse is slower by fifteen or twenty beats per minute. Concluding, the author states that general anæsthetics in such cases sometimes lead to dyspnœa of an alarming kind. This produces two evil results, (a) hæmorrhage, very severe and troublesome; (b) such a degree of laryngeal spasmodic obstruction as to render tracheotomy necessary. Tracheotomy not infrequently leads to septic infection, by way of the tube in the air passage, of the large spaces left after removal of the thyroid lobes, with ultimate infection of the cellular planes of the neck, and death from pyæmia.

The Treatment of Rhachitis with Suprarenal Substance.—By Dr. W. STOELTZNER, *Deutsche med. Wochenschr.*, September 14, 1899. The author's investigations cover a period of sixteen months. The treatment was employed in seventy-six cases. Stoeltzner comes to the following conclusions:

1. The general condition is much improved, i. e. the restlessness, sensitiveness, perspiration, the vaso-motor irritability, and particularly the

cranio-tabes. Frequently the above symptoms markedly improve in one or two weeks.

2. Teething is very much helped. The children learn to sit down, walk and stand much more readily. The softened condition of the thorax also improves so rapidly after treatment is started that it cannot be considered a mere coincidence.

3. The abnormal size of the fontanelles, the deformity of the thorax, the swellings of the epiphyses and the bending of the extremities are not benefitted as much.

4. The glottis spasm usually resists the treatment for a long time.

5. The improvement is usually most marked during the early weeks of treatment, and later is more gradual.

6. If the treatment is stopped the improvement ceases or the condition gets worse again; as soon as treatment is resumed the rickets rapidly improves.

7. Even in complicated cases (with lues, bronchitis, intestinal disturbances and pneumonias), the condition gets very much better.

Finally the author briefly gives the report of a very rhachitic child, who after having been under treatment one month, developed an acute diffuse capillary bronchitis and died. He was able in this case to make an exact histological examination of the bones. There were only traces of osteoid tissue left, and even the periosteal osteophytes showed the reactions of a former calcification of the bony substance.

Gonococcus Joint Disease in Infants, Secondary to Purulent Ophthalmia.—In a paper read before the Royal Medical and Chirurgical Society of London, LUCAS (*Brit. Med. Journal*, Jan. 28, 1899,) gives some particulars of all the cases of arthritis secondary to the purulent ophthalmia of infants which have been recorded since he first drew attention to this form of joint disease in 1885.

He has included twenty-three cases in his list, and although some of these admit of doubt, the large majority seem to be genuine examples of the affection under consideration. Eighteen of the patients were newly-born infants, and infection of the conjunctiva occurred at or immediately after birth; the remaining five cases were in older children, and the eyes were inoculated from outside sources. The eldest was a child of seven years, to whom contagion was conveyed by the finger of another child.

The joint disease is met with in two forms: (1) a very acute arthritis with much redness and swelling and tenderness; (2) a subacute synovitis, with considerable effusion, but little redness over the joint. The arthritic symptoms show themselves most frequently towards the end of the second, or during the third week of the conjunctivitis. The extremes have been the fourth day and the thirteenth week.

The disease exhibits a decided predilection in favor of the knee joint (14 of the 23 cases). The wrist joint comes next in order of frequency; the elbow, ankle, hip and joints of the hand and foot have all been affected. In a few instances the arthritis subsides in from ten to fourteen days, but as a rule three or four weeks elapse before recovery is complete. Suppur-

ation rarely occurs; in three of the twenty-three cases given, this result accrued.

The presence of Neisser's gonococcus in the inflamed joints has been demonstrated by more than one observer. In cases in which suppuration occurred in the joint, the author thinks it probable that double infection takes place. In two of the three reported instances other micro-organisms were identified in association with the gonococcus; in one streptococci, and in another staphylococci were found.

The treatment, Lucas states, should be directed mainly to the conjunctiva, this being the source of infection of the joints. Locally, evaporating lotions may be of use, and the inflamed joints may be protected by cotton wool and a bandage. That this complication of purulent conjunctivitis of infants is very uncommon is evidenced by the fact that no one of the speakers in the discussion upon Lucas's paper had seen an example, with the single exception of Higgins, who had sent the first case to Lucas, and also by the fact that acute arthritis secondary to purulent ophthalmia is but seldom described by writers of text-books on general or ophthalmic surgery.

LARYNGOLOGY AND RHINOLOGY

Edited by C. F. Theisen, M. D.

Sarcoma of the Nasal Passages.—H. V. WÜRDEMAN in the *Laryngoscope*, October, 1899, gives the report of a most interesting case. The patient was a woman aged 47, who nine years ago consulted the author for nasal bleeding and obstruction. Some time before that a number of polypi had been forcibly removed "by tearing out with the forceps" by another physician. The author removed three fibro-cystic growths about the size of walnuts from the one nostril with the cold wire snare. A few weeks later mucous polypi and a large hard tumor were removed from the nostrils. A recurrence of the hard tumors occurred three weeks after the operation and were again removed, together with the superior turbinate. There has been no recurrence since 1891.

The specimens removed were examined by a number of pathologists, the growth being pronounced by nearly all of them to be small round-celled sarcoma. The author in conclusion remarks that the case has not only pathologic interest, but the fact of a permanent recovery from nasal sarcoma is of considerable clinical significance, as it shows that these cases may at times be cured if radical removal of the tumors is done sufficiently early.

Adeno-Sarcoma of the Nasal Septum.—A. R. BAKER, in the *Laryngoscope*, October, 1899, reports the case of a lady, aged 49, who at the time of the first examination had a flattened tumor which involved the cartilaginous septum. A portion of the tumor was removed and sent to a microscopist for examination, who pronounced it a non-malignant adenoma. The tumor was subsequently entirely removed with the curette in the hospital. Two years later the patient returned with a recurrence of the growth. Another specimen was examined and it was

now found that the case was one of typical adeno-sarcoma. The Rouge operation, which consists in making an incision beneath the upper lip and turning the lip and nose up over the forehead, was done, and nearly the entire septum removed. The patient made a rapid recovery and fourteen months after the operation there had been no recurrence.

The author in conclusion considers the possibility of a benign adenoma becoming malignant. In his case the entire tumor after both operations was submitted to several microscopists, all of whom concurred in pronouncing the first a benign and the last a malignant tumor, without knowing anything about the history of the case.

Primary Epithelioma of the Uvula and Soft Palate.—LENNOX BROWNE (*Laryngoscope*, June, 1899,) reports two cases. The first case was that of a man 48 years old, who had been an excessive smoker. He had complained for some time of pain and difficulty in swallowing. There was a family history of cancer, the father having had an operation (amputation at the knee joint for sarcoma). The uvula was hard and nodular and the disease extended to the soft palate. Microscopical examination of the tumor showed it to be an epithelioma.

In the second case, a man 52 years old, the entire soft palate was much reddened, and a small nodular tumor was situated on the free edge of the left anterior faucial pillar. Examination of a piece of the growth showed it to be malignant. There was no swelling of the glands in either case.

Two Cases of Stenosis of the Larynx Treated by Dilatation Cure.—A. RUNDSTROM, report in *Internat. Centralbl.*, October, 1899. The first case was that of a young man, aged 37, who had attempted suicide by cutting his throat. The incision had gone through the larynx directly under the cricoid cartilage. A tracheal canula was inserted and the wound closed. The wound healed in a month and the canula was removed. Two weeks later the canula had to be put back on account of difficulty in breathing. The stenosis was caused partly by masses of granulation tissue and partly by a membrane which separated the upper from the lower part of the larynx. After treatment for nearly a year with Schrötters' dilatation bougies and intubation tubes, the stenosis was permanently cured.

The second case was one of syphilitic laryngeal perichondritis. A tracheotomy was done in this case also. Following this 'Schrötters' dilators and intubation tubes were used for two months which entirely relieved the stenosis.

A Case of Primary Epithelioma of the Uvula.—WALKER DOWNIE, in *Scottish Medical and Surgical Journal*, January, 1899, reports a case of this rather rare condition. The patient was a man 56 years old who had complained of pain about the throat for some time. Examination showed a considerable swelling of the uvula, which was ulcerated on the anterior surface. The uvula was firm to the touch and bled easily. The uvula was removed, care having been taken to include considerable healthy tissue. Microscopical examination proved that the growth was an epithelioma. There was no recurrence after nearly a year and a half. There was no involvement of the lymphatic glands in this case.

Malignant Struma with Severe Hæmorrhage from Varicose Veins of the Œsophagus.—H. HELLENDALL in *Deutsche. med. Wochenschr.*, No. 14, 1899, reports the case of a woman 58 years of age, who had had a goitre for five years, which, during the last six months, had been growing very rapidly. During this time there had been frequent vomiting of blood. At the autopsy a tumor of the thyroid was found which had involved the sternum, causing softening and thrombosis of the jugular veins. In the œsophagus were found varicose veins, which had caused the hæmorrhages. On histological examination the peripheral portions of the growth were found to have a carcinomatous structure.

An Interesting Case of Fatal Dyspnœa in a Child.—S. E. ALLEN, in the *Laryngoscope*, October, 1899, reports the case of a big, healthy looking country boy, aged 4, who had died suddenly during the night of an attack of dyspnœa. Post-mortem examination disclosed the following conditions: The larynx, trachea and lungs were examined. The lungs were normal except at apex. When the trachea was split a large amount of cheesy material was found, sufficient to occlude the lumen and cause asphyxia. Close to the bifurcation there was a large ulceration the size of a ten cent piece and some small ones. A mass of enlarged glands encircled the trachea at this point and included in the mass was some consolidated lung tissue from the apices. This gland mass when cut through was seen to be entirely broken down. Microscopic examination of the firmer masses revealed typical tubercles. Death had been caused by the breaking down of the localized tubercular mass and the discharge into the trachea of caseous material too great in amount to be expelled. The author states that this boy had been treated at the Cincinnati hospital for severe attacks of dyspnœa, which had come on a month before his admission. A laryngoscopic examination showed the cords and upper portion of the larynx to be perfectly free. Movements of the cords were normal; child's breathing was difficult and noisy, expiration being more difficult apparently than inspiration. Under chloroform there was the same noisy respiration. An œsophageal bougie passed into the stomach without any difficulty. The diagnosis of a foreign body in the trachea seemed the only rational one, and a tracheotomy was performed but nothing wrong was found. An examination of the lungs, had been very difficult on account of the noisy, rattling sounds in the trachea.

Naso-pharyngeal Adenoid Growths.—R. R. STOWELL (Melbourne) reports in *Internal. Centralbl.*, March, 1899. Cf 12,600 children that came under the author's observation in the Child's Hospital, Polyclinic in Melbourne, over 670 had such undoubted symptoms of adenoids that the disease could be recognized at a glance. Author mentions the frequency of adenoid vegetations in early life. He has seen them in children four months old. He claims that some cases of deaf-mutism resulted from adenoids in early life, the hearing in these cases being gradually lost. In performing the operation chloroform is always used, 3,000 cases having been operated on with no accidents.

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